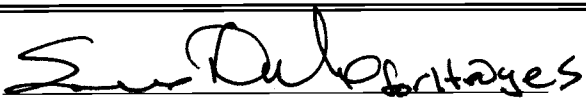
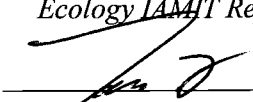
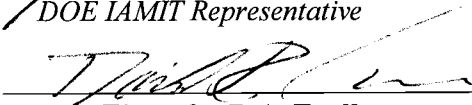



**Office of River Protection  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
November 17, 2011**

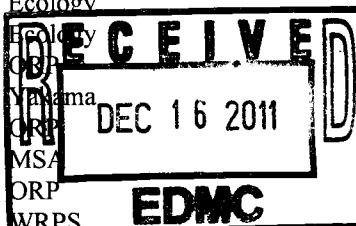
Approval:  Date: 12-14-11  
**J.A. Hedges**  
Ecology IAMIT Representative

Approval:  Date: 12/15/11  
**T.W. Fletcher**  
DOE IAMIT Representative

Approval:  Date: 13 Dec 11  
**D.R. Einan for D.A. Faulk**  
EPA IAMIT Representative

Minutes Prepared by:  Date: 12/15/11  
**T.W. Noland**  
Mission Support Alliance

Abdul, W.	ORP	Knutson, D.E.	ORP
Barnes, M.W.*	Ecology	Lober, R.W.*	ORP
Biyani, R. K.	Ecology	Luke, J.J.*	WRPS
Bohnee, G.	NPT	Lynch, J.J.*	ORP
Caggiano, J.A.*	Ecology	Lyon, J.J.*	Ecology
Charboneau, S.L.	ORP	McDonald, D.*	Ecology
Cimon, S.*	ODE	Miera, F.R.	WRPS
Dahl, S.L.	Ecology	Niles, K.	OOE
Diediker, J.A.*	ORP	Noland, T.W.*	MSA
Donnelly J.W.	WRPS	Norton, J.F.*	ORP
Dowell, J.A.	RL	Noyes, D.L.*	ORP
Eberlein, S.J.*	WRPS	Olsen, G.B.	ORP
Einan, D.R.*	EPA	Pfaff, S.H.*	ORP
Faulk, D.A.	EPA	Piippo, R.E.*	MSA
Fletcher, T.W.*	ORP	Price, J.B.*	Ecology
Harp, B.J.*	ORP	Quigley, K.D.*	WRPS
Harrington, C.C.*	ORP	Russell, R.W.*	ORP
Harris, S.	CTUIR	Skinnarland, R.R.	Ecology
Hedges, J.*	Ecology	Smith, D.M.*	ORP
Hendrickson, M.L.*	Ecology	Teimouri, A.E.	HQ
Huffman, L.A.	ORP	Trenchard, G.D.*	ORP
Jim, R.	Yakama	Uziemblo, N.H.*	Ecology
Johnson, J.M.*	ORP	Vanni, J.*	Yakama
Kaldor, R.A.*	MSA	Whalen, C.L.*	Ecology
Kemp, C.J.*	ORP	Young, J.D.	ORP
Killoy, S.E.*	WRPS		Administrative Record
Knight, D.P.*	ORP		
Knox, K.E.*	KCR		



\*Attendees

**Office of River Protection  
Tri-Party Agreement Quarterly Milestone Review  
Meeting Minutes  
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**TPA/CD Statistics/Status**

ORP reported that the TPA milestones are on schedule, with the exception of milestone M-045-91F-T01. The target date for this milestone is at risk. A meeting was held with Ecology and ORP on November 3, 2011 to discuss Ecology's questions regarding SST integrity. The meeting was established as an action from the ORP project managers meeting (PMM) held on October 25, 2011. The 11/3/11 meeting minutes have been submitted to the Administrative Record (AR). ORP noted that new action items will be created from the 11/3/11 meeting and will be updated at the next PMM. ORP provided a handout of agreements, issues and actions that were generated from the 10/25/11 PMM and the recent items that were submitted to the AR. ORP noted that a notification for a waste compatibility assessment associated with tank 241-C-112, dated November 1, 2011, was submitted to the AR.

Ecology noted that per its request, the ORP representative for integration between Tank Farms and the WTP was present today to participate in the tank farms/WTP meetings and expressed appreciation that the action has been met. The ORP integration representative stated that the order of priority from the tank farms' perspective is: 1) waste feed delivery; 2) acquisition of new facilities; 3) supplemental treatment. From the WTP side, the interface control documents cover the majority of integration between WTP and tank farms. If there are other areas to focus on from Ecology's perspective, to let the ORP integration representative know. Ecology requested a meeting with the ORP integration representative to have a full lifecycle discussion.

**Single-Shell Tank Corrective Action; Milestone M-45, -50, -60**

M-045-92 - ORP noted that this milestones is on schedule. A TY barrier monitoring plan revision was delivered under an earlier milestone M-045-92B and is based on data accumulated to date. The TY barrier monitoring plan revision will be submitted via a TPA change notice by mid-December 2011, which will satisfy an action from the 10/25/11 PMM.

Significant Planned Actions in the Next Six Months - ORP completed the direct push campaign for future barriers in S Farm, and Ecology was briefed on the results to date, satisfying an action from the 10/25/11 PMM.

Issues - ORP reiterated that FY12 funding constraints may impact the FY12 scheduled work scope. Ecology asked if the construction of the interim barrier in 2012 is still achievable. ORP responded that if the necessary compliance budget is received, the interim barrier can be achieved. ORP added that once the funding is received, a reprioritization of work scope will take place. At that time, as required by the TPA, ORP will discuss its baseline change request priorities with Ecology.

**M-45-00 Series:**

SST Retrieval and Closure Program - ORP reported that Ecology's comments have been resolved on the closure strategy document for the catch tanks (M-045-101), and that updated review, comment, record (RCRs) have been sent to Ecology. Ecology requested an extension to January 31, 2011 for comment resolution. ORP stated that three of the four documents associated with M-045-80 are in ORP concurrence based on Ecology comment disposition. ORP inquired about the status of Ecology comments on the WIR process paper. Ecology stated that at least three comments have been generated, and the draft letter to transmit comments to ORP is being prepared today. ORP reported that meetings have been held with Ecology regarding the pipeline removal study (M-045-81), and a meeting is scheduled for later today. ORP noted the current extension to December 5, 2011 for comment resolution, and requested another extension to January 31, 2012. ORP and Ecology agreed to the 1/31/12 extensions for comment resolution on the documents for milestones 101 and 81. Ecology asked for clarification of the description for the document associated with milestone 81. ORP responded that it is a pipeline feasibility study.

Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria - ORP reported no change in status.

C-Farm Critical Path - The C-101 retrieval system installation activity has slipped out due to resources not being available. Resources are supporting other priority efforts, including tanks C-107, C-108, C-112. Ecology asked about the impact if C-101 slips out further. ORP responded that as long as the activity is not a critical path the schedule can be made up, and C-101 is not considered critical path. There are mitigating actions available if an activity becomes critical path, such as shifting to additional crews. Ecology asked about the difference between the baseline bar and the schedule bar. ORP responded that even though the bar reflecting actual work may be longer than the baseline bar, it does not mean that there is more work. The work remains the same, but the efforts have been reprioritized to allow flexibility for critical path, which shifts some work out because of its noncritical path activity. Ecology expressed a continued concern about how the schedules are reflected, and ORP offered to have a discussion with Ecology in more detail about the baseline.

For tank C-105, there are slips in the Phase 1 activity for retrieval system installation as details are being developed in the Integrated Mission Execution Schedule (IMES). There were no changes to the C-107 schedule. C-108 hard heel removal (HRR) installation activity reflected a slip due to completion of punch list items. None of the start of operation activities were affected. There were no changes for C-109 and C-110. C-111 sample for HHR decision shows a significant improvement as plans are being developed to deploy the Raman spectrometer and a riser to determine hard heel constituents. Improvements to retrieval startup and readiness and retrieval operations in C-112 are the result of correcting errors in the September 2011 month end schedule status. There were changes to C Farm infrastructure DST receiver tank 4 that reflected details being developed in the lower detailed IMES schedule. Upgrades to the AN-101 supernatant pump and jumpers are in support of C Farm tanks being retrieved to AN-101.

ORP reported on questions that were received from Ecology related to the BBI and retrieval of C-104 and the activity associated with C-101 and C-102. ORP stated that a meeting will be

scheduled with Ecology in two weeks to discuss the questions. ORP noted that Ecology requested the Raman report, and the report will be transmitted to Ecology. ORP stated the intent is to schedule a meeting with Ecology on December 15, 2011 regarding the issue and action from the 10/25/11 PMM about the CD retrieval certification report.

Tank Retrievals with Individual Milestones - ORP reported no change in status.

Double Shell Tank Closure - No change in status.

242-A Evaporator Status - The evaporator schedule reflects the start of a campaign in August 2012. ORP stated that there has been discussion about pushing the campaign out until March 2013, but a decision has not been made yet. ORP noted that a revision of the DOE order on startup and restart is being implemented, which will require some changes for starting up a facility that has been shut down for a while. If the campaign is pushed out to 2013, it will allow time to get the new procedure lined up. ORP stated that the modification to the existing documented safety analysis (DSA) will be done this fiscal year. The new order will require more integration between ORP and the contractor with their start of activities. ORP will be required to approve the contractor's procedures, and the contractor is currently revising its procedures to adjust to the new order. The revised procedure will less likely force an operational readiness and allow for a lower tier readiness assessment (RA). Ecology asked if the RA will sufficiently cover the 14 points of an ORR. ORP responded that the RA will be comprehensive enough, and offered to sit down and discuss the RA with Ecology at any time. ORP will keep Ecology advised of the schedule for the evaporator.

SST Retrieval and Closure CD Milestones and TWRWP Status; D-00B Series -

ORP has requested Washington River Protection Solutions (WRPS) to meet with Ecology to discuss the C-101 tank waste retrieval work plan (TWRWP). ORP stated that the goal is to resolve all comments informally this month on the TWRWP and formally submit it to Ecology the first of January 2012.

### **SST Integrity Assurance; M-45-91**

M-045-91F-T01 - ORP reported this milestone is at risk, due to FY12 funding uncertainties. The rest of the milestones are currently on schedule, pending the final budget appropriations. ORP noted that funding in FY11 allowed the contractor to complete milestones and target dates on schedule or ahead of schedule, and that funding for FY12 will not allow the contractor to be as aggressive in completing milestones.

Significant Past Accomplishments - The concrete specimens taken from the C-107 dome plug have been tested (M-045-91D), and the report from the lab is anticipated to be received shortly.

Significant Planned Actions in the Next Six Months - ORP reported that the work associated with using ionic conductivity to evaluate past tank leaks has been done, and a report will be completed (M-045-91F-T01). ORP stated that the structural analyses for single-shell tanks (type 3) have been transmitted to Ecology (M-045-91G-T02).

### **In Tank Characterization and Summary**

ORP noted that there are several sampling efforts planned in the next six months. There were no issues to report.



## **Tank Operations Contract (TOC) Overview**

ORP reported that the FY11 base contract work for the TOC wrapped up with minor fiscal year-to-date variances. The schedule performance indicator (SPI) was on schedule the majority of the year, and the cost performance indicator (CPI) completed above budget expectations. Baseline change request RPP-11-222 has been submitted in preparation to implement changes to the earned value management system (EVMS) for the FY12 performance measure baseline (PMB). ORP acknowledged the TOC had limited lost time work day injuries in the last 172 days with no reportable case. Recovery Act work was safely completed on September 30, 2011. A total of \$300 million was spent on 71 projects, and 3,640 key performance parameters were completed. ORP summarized that FY11 was an excellent year, considering the magnitude of the scope of work and the availability of funds.

For retrieval and closure operations, significant progress was made through September and October 2011 testing of the C-107 mobile arm retrieval system (MARS) arm. The AN-106 pumping system was initiated. For waste feed delivery, upgrades were completed on the AP and SY Farm exhausters and the factory acceptance test was completed. Design/fabrication and factory acceptance testing have been completed on the core sampling x-ray machine. The core sampling platform was received and operational testing was performed. For supplemental treatment, conceptual design/critical decision for Immobilized High Level Waste (IHLW) canister storage were conducted. Ecology asked if the information was submitted to Headquarters to start the critical decision (CD) process. ORP responded that the information was sent for HLW. ORP noted that the CD-0 package for secondary waste and Interim Hanford Storage was grandfathered in under a DOE letter in 2007 (see further discussion below).

## **Acquisition of New Facilities; M-90-00, M-47-00**

ORP reported that negotiations are not yet under way for milestones M-090-11 and M-047-06; however, internal meetings are being held to develop the negotiation strategy, and an informal meeting was held with Ecology to discuss ORP's general philosophy for the negotiations. ORP stated that Interim Hanford Storage and Secondary Waste Treatment Project are at CD-0, and conceptual design for CD-1 is under way. Both projects are slated for submittal of CD-1 by early fall 2012. Yakama Nation (YN) asked for a briefing regarding the selection of Cast Stone as the preferred waste form for solidification of secondary waste. YN was provided a contact to set up a briefing.

Ecology initiated a discussion about the waste receiver facilities and the infrastructure pipelines for waste delivery to the DST systems, noting that there are no TPA milestones that identify any construction for those facilities. ORP acknowledged that those facilities are not currently under a milestone within the TPA, but they are planned for future needs to provide infrastructure to retrieve B and T tanks, and that U would pipe into the new pipelines. Ecology asked where these facilities fit into the integration of WTP and the SSTs. ORP responded that the facilities would be considered outside the scope of integration, but would be within the scope of tank farms. ORP pointed out that acquisition of new facilities encompasses secondary liquid waste treatment

and the Interim Hanford Storage facility, and those are the two projects that tank farms has to provide to allow WTP to meet its Consent Decree requirements.

YN asked why the waste receiver facilities and pipelines are being considered if there are no TPA milestones that require them. ORP responded that it is being considered from the commissioning approach. It would allow commissioning of a Category 3 facility and gain the knowledge on commissioning a Cat 3. The process would alleviate some of the pressure to meet the initial plant operations of 70 percent total operational efficiency on the WTP side and provide some risk mitigation. ORP pointed out that the concept has been recommended to some extent by the Environmental Management Advisory Board, the Tank Waste Subcommittee, the Construction Project Review teams, and public board meetings.

### **Supplemental Treatment/Part B Permit Applications; M-62-00, -20, -30, -45**

ORP reported that the contractor submitted all the CD-1 deliverables that would be required to get permission to proceed with the supplemental treatment project. ORP has been reviewing the deliverables and compiled a number of comments that need to be resolved before the CD-1 package could be submitted to Headquarters. ORP stated that currently there is no funding under the continuing resolution for supplemental pretreatment. ORP is waiting for the FY12 appropriation to determine whether the contractor team can be reassembled to continue with comment resolution against the CD-1 package and then seek approval for CD-1.

The contractor has produced a draft alternatives analysis report on the supplemental immobilization project. ORP is reviewing and compiling comments on the report so that when funding becomes available and the project is taken up again, ORP will already have made progress. The documents required for the CD-1 package have not been produced, and it is not anticipated that work will be done in FY12.

### **M-62-40, System Plan**

ORP reported that System Plan Revision 6 (SP6) was submitted on schedule. Discussions are ongoing about the possibility of producing an SP6 addendum instead of generating a full SP7. An estimated start date for the SP6 addendum would be between January and March 2012, with the results being published between June and August 2013. Following the release of the SP6 addendum, SP7 would start up between July and September 2013, and the final product would be completed in time to meet the TPA milestone in 2014.

### **WTP Overall TPA and CD Summary and Milestone Status; M-62-01; M-62-49; D-00A-01, -06, -17**

ORP noted that M-062-49 was completed and the report was submitted to Ecology. ORP offered to provide follow-up details or information to Ecology, if requested, after the milestone report has been reviewed. There has been a slight reduction in the work force with the upcoming holiday season, and the work will not be ramping up, due to the congressional funding at \$740 million versus ORP's approved baseline of \$840 million. The intent is to stabilize the work

force as opposed to ramping up and then having to ramp back down. ORP is continuing to have extensive dialogue with Congress on the outyear funding profile in an effort to get the profile supported or to get clarity on what an alternate profile would be and what the impacts would be relative to Consent Decree milestones if there were an alternate profile. ORP has also been communicating through headquarters to Congress that WTP and tank farms need to be funded jointly since WTP cannot operate without the tank farm facility feeding waste to WTP, and conversely, tank farms cannot feed waste to the WTP plant if it is not operational.

ORP provided a status on vessel corrosion, which has been discussed with Ecology. ORP has issued two assessments recently that challenged some of the assumptions in the design relative to corrosion in ten tanks, and specifically in two UFP vessels, from a caustic perspective. As the temperatures have changed, the basis for the localized stress corrosion appears to be weak and not supporting the design. One of the assessments is a level 1 finding, which is considered a higher significant level, and Ecology has been notified. ORP will be drafting a letter to formally share the information with Ecology and what the next steps will be. ORP is expecting an initial response from the contractor by December 19, 2011, and there should be more information at that point to determine if there is any extent of conditions beyond those tanks. ORP requested that Ecology defer any permit actions that are in progress associated with those ten tanks until the information is received on December 19. Ecology stated that there is a hold on any permit actions associated with corrosion, with the exception of a case-by-case basis in which Ecology's and ORP's engineers have thoroughly vetted a particular issue. ORP reiterated that a conclusion has not been drawn that there is a problem with corrosion, but there is a conclusion that the documentation isn't sufficient to conclude that the design is defensible. ORP noted that there have been questions and issues with the public in terms of erosion, and based on the last briefings there is no change in status on that issue.

One process that ORP will be documenting in the corrosion findings letter to Ecology is a comprehensive assessment of all aspects of corrosion and erosion and the design. The assessment will aid in ensuring that the design can be verified, and Ecology will be kept apprised during the process. ORP will be bringing in external expertise to assist in the assessment process.

YN asked if the concern with corrosion and erosion is with the external or internal portions of the tank. ORP responded that the assessment findings are with corrosion specifically and not erosion, and they're tied with the materials in the tanks, i.e., the conditions inside the ten tanks and the one assessment of the two other tanks. ORP stated that it is not generalized corrosion, but the focus of the issue is how the national standards are addressed and documented in the design on the mechanisms of localized corrosion such as pitting or stress corrosion.

#### **WTP Pretreatment (PT) Facility; D-00A-13, -14, -15, -16, -19**

Significant Past Accomplishments - The fifth lift walls have been completed in the Pretreatment facility, which means all the concrete walls have been poured at the 77- to 98-foot level. Two more piping modules were set in planning areas in Pretreatment. The modules are manufactured on the ground, detailed surveys of the modules are done, and then the modules are picked up and

set in place. These procedures allow the work to be done faster and safer since all of the work is not elevated. It also helps to manage critical path through the black cell construction. Another positive is there have not been any issues with sizing or tolerances with the modules.

Significant Planned Actions in the Next Six Months - ORP formally submitted to Ecology the implementation plan which describes all the actions to resolve the mixing issue for Pretreatment. The plan is in response to the Defense Nuclear Facilities Safety Board (DNFSB) recommendation on mixing and large scale testing. The large scale integrated testing (LSIT) will be performed in the next six months. Some of the informational four-foot testing has been done, and the information has helped identify ways to cause a better performance in the mixing. The information will be used in the larger scale testing and demonstrate it on an NQA-1 test bed. The design and the data collect from the NQA-1 test will then be used as part of the validation of design and/or verification of any design modifications needed. Construction to house the LSIT is ongoing. The design engineering and procurement activities are ongoing for the eight-foot and 14-foot test platforms. The design is scheduled for completion in March 2012. The LSIT schedule still supports the need dates to collect sufficient information as to whether or not the designs will be verified and validated prior to placement of the five non-Newtonian vessels. ORP noted that replacement of the five vessels would be approximately \$30 million, but the main impact to the project would be a schedule impact to remanufacture the five vessels.

Issues - ORP noted the issue with vessel HLP-22, impacting the critical path by about seven to eight weeks. ORP indicated there were no major impacts from the issue.

#### **WTP High-Level Waste (HLW) Facility; D-00A-02, -03, -04, -21**

ORP stated that the build-out of the filter cave still remains the critical path, and it is being maintained.

Issues - ORP reported that the devices have been modified that are used to test the HEPA filters to ensure the efficiencies that are assumed in the permitting are being obtained. The QA aspects and the extent of conditions from an overall QA are still being pursued.

#### **WTP Low-Activity Waste (LAW) Facility; D-00A-07, -08, -09**

#### **WTP Analytical Laboratory (LAB); D-00A-05**

#### **WTP Balance of Facilities (BOF); D-00A-12**

ORP noted that some organizational changes were made, and a federal project manager (FPM) has been assigned to focus specifically on the LAW facility, and another FPM assigned to focus on LAB and BOF. The purpose of the assignments is to engage more manpower as the early startup and commissioning phases kick in. The carbon bed adsorbers (CBA) for LAW are anticipated for delivery this week. The CBAs are a significant component of the offgas treatment system. ORP reported that LAW, LAB and BOF continue to move forward with no significant issues.



## Agenda

November 17, 2011

### Office of River Protection Quarterly Milestone Review Meeting

Ecology Offices, Conference Room 3A/B

**Chairperson: Stacy Charboneau**

Topic	Leads	Time
Statistics / Status	Woody Russell / Dan McDonald / Jeff Lyon	8:30
Single-Shell Tank Corrective Action; M-45, -50, -60	Bob Lober / Jeff Lyon	8:35
Single-Shell Retrieval and Closure Program TPA Milestones Status; M-45-00 series, <ul style="list-style-type: none"> <li>- Tank in Appendix H Status</li> <li>- C-Farm Critical Path</li> <li>- Tanks with Individual Milestones</li> <li>- Double-Shell Tank Closure</li> <li>- 242-A Evaporator Status</li> </ul> SST Retrieval and Closure CD Milestones and TWRWP Status; D-00B series	Chris Kemp / Dan Knight / Jeff Lyon	8:50
SST Integrity Assurance; M-45-91	Jeremy Johnson / Michelle Hendrickson	9:10
In Tank Characterization and Summary	Jeremy Johnson / Michael Barnes	9:15
Tank Operations Contract (TOC) Overview	Dan Knight / Jeff Lyon	9:20
Acquisition of New Facilities; M-90-00; M-47-00	Janet Diediker / Jeff Lyon / Dan McDonald	9:35
Supplemental Treatment and Part B Permit Applications; M-62-00, -20, -30, -45	Steve Pfaff / Jeff Lyon / Dan McDonald	9:40
System Plan; M-62-40	Ron Koll / Jeff Lyon / Dan McDonald	9:45
WTP Overall TPA and CD Summary and Milestones Status; M-62-01; M-62-49; D-00A-01, -06, -17	Delmar Noyes / Dan McDonald	10:00
WTP Pretreatment (PT) Facility; D-00A-13, -14, -15, -16, -19	Delmar Noyes / Dan McDonald	10:05
WTP High-Level Waste (HLW) Facility; D-00A-02, -03, -04, -21	Delmar Noyes / Dan McDonald	10:10
WTP Low-Activity Waste (LAW) Facility; D-00A-07, -08, -09	Delmar Noyes / Dan McDonald	10:15
WTP Analytical Laboratory (LAB); D-00A-05		10:20
WTP Balance of Facilities (BOF); D-00A-12		10:25

Tri-Party Agreement Office of River Protection Milestone Review  
November 17, 2011

<u>Name</u>	<u>Organization</u>
Steve Kilroy	WRPS
Jeff Luke	WRPS
Joni Norton	DOE-ORP
Susan Eberlein	WRPS
Reed Kaldor	MSA
Mike Barnes	Ecology
Debra Smith	DOE-ORP
Van McNair	Ecology
Cheryl Whalen	Ecology
Sharon Simon	ORP
Tam Fletcher	DOE-ORP
Chris Kaye	DOE-ORP
JANE HEDGES	Ecology
Dave Egan	EPA
Jeff Lyon	Ecology
Steve Pfaff	ORP
Spady Russell	ORP
Michelle Hendrickson	Ecy
John P.	Ecology
JOE CAGGIANO	Ecology
Nancy Unger	Ecology
Jeremy Johnson	ORP
Jean Vanni	YN

*Tri-Party Agreement Office of River Protection Milestone Review  
November 17, 2011*

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**FINAL**

# Office of River Protection

## Tri-Party Agreement Project Summary Report November 17, 2011





Office of River Protection  
Tri-Party Agreement Milestone Review Meeting  
November 17, 2011  
8:30 a.m. – 11:00 a.m.

Page	Topic	Leads	Time
TPA 1 / CD 1	Statistics / Status / Minutes Discussion	Woody Russell / Dan McDonald / Jeff Lyon	8:30
TPA 6	Single-Shell Tank Corrective Action; M-45, -50, -60	Bob Lober / Jeff Lyon	8:35
TPA 8 / CD 5	Single-Shell Retrieval and Closure Program TPA Milestones Status; M-45-00 series, <ul style="list-style-type: none"> <li>- Tank in Appendix H Status</li> <li>- C-Farm Critical Path</li> <li>- Tanks with Individual Milestones</li> <li>- Double-Shell Tank Closure</li> <li>- 242-A Evaporator Status</li> </ul> SST Retrieval and Closure CD Milestones and TWRWP Status; D-00B series	Chris Kemp / Dan Knight / Jeff Lyon	8:55
TPA 17	SST Integrity Assurance; M-45-91	Jeremy Johnson / Michelle Hendrickson	9:15
TPA 20	In Tank Characterization and Summary	Jeremy Johnson / Michael Barnes	9:20
TPA 21	Tank Operations Contract (TOC) Overview	Dan Knight / Jeff Lyon	9:25
TPA 26	Acquisition of New Facilities; M-90-00; M-47-00	Janet Diediker / Jeff Lyon / Dan McDonald	9:35
TPA 28	Supplemental Treatment and Part B Permit Applications; M-62-00, -20, -30, -45	Steve Pfaff / Jeff Lyon / Dan McDonald	9:40
TPA 29	System Plan; M-62-40	Dabrisha Smith / Jeff Lyon / Dan McDonald	9:45
<b>BREAK</b>			
TPA 30 / CD 7	WTP Overall TPA and CD Summary and Milestones Status; M-62-01; M-62-49; D-00A-01, -06, -17	Delmar Noyes / Dan McDonald	10:00
TPA 32 / CD 9	WTP Pretreatment (PT) Facility; D-00A-13, -14, -15, -16, -19	Wahed Abdul / Dan McDonald	10:10
TPA 34 / CD 12	WTP High-Level Waste (HLW) Facility; D-00A-02, -03, -04, -21	Gary Olsen / Dan McDonald	10:20
TPA 35 / CD 14	WTP Low-Activity Waste (LAW) Facility; D-00A-07, -08, -09	Jeff Bruggeman / Dan McDonald	10:30
TPA 37 / CD 17	WTP Analytical Laboratory (LAB); D-00A-05	Jason Young / Dan McDonald	10:40
TPA 38 / CD 19	WTP Balance of Facilities (BOF); D-00A-12		10:50

### Fiscal Year 2011 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-062-40A	Select a Minimum of 3 scenarios	10/31/10	10/27/10										
D-001-00-R46	Quarterly Report	10/31/10	10/28/10										
M-045-100	Submit to Ecology an Agreement Primary Document a Catch Tank "Assumed Leak" Response Plan.	12/28/10	12/28/10										X - CLOSED, Resolved 10/05/11
M-045-101	Submit to Ecology as an Agreement Primary Document a Report on all Catch Tanks and Pipelines Used for SST Operations	12/28/10	12/28/10										
M-045-91A	Submit an Agreement Change Package with Interim Milestones to Implement the Panel's Recommendations M-045-91	12/27/10	09/27/10										
M-045-92D	Complete Negotiations to Schedule Remaining 4 Additional Barriers	12/31/10	12/07/10										
M-045-92E	Meet Yearly on Performance of Barrier	12/31/10	12/07/10										

### Fiscal Year 2011 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-062-20	Complete All 28 Issues in Independent WTP Flowsheet & Throughput Assessment	12/31/10	08/20/10										
M-045-80	Complete those Portions of C-200 Closure Demonstration Plan Necessary to Complete Closure Plan Development for SST System	01/31/11	12/28/10										
M-062-01V	Submit Semi-Annual Project Compliance Report	01/31/11	01/27/11										
D-001-00-R47	Quarterly Report	01/31/11	01/28/11										
M-045-91G-T05	Provide Report of the Visual Inspections of 12 SSTs in Table 3.3	03/31/11	03/11/11										
M-045-92K	Barrier 1 Design/Monitoring Approval from Ecology	06/30/11	05/19/11										
M-036-01A	Submit to EPA & Ecology Lifecycle, Scope, Schedule & Cost for Hanford Site (RL is DOE Lead)	07/25/11	07/21/11										



### Fiscal Year 2011 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-045-56G	Ecology and DOE Agree to Meet, at a Minimum, Yearly (by July)	07/31/11	07/13/11										
M-062-01W	Submit Semi-Annual Project Compliance Report	07/31/11	07/28/11										
M-045-91C	Implement DQO Process, Test Plan to Evaluate the Chemistries	09/30/11	09/15/11										
M-045-91G-T01	Provide AOR Final Doc. For SSTs on 530,000 Gallon Tanks	09/30/11	09/15/11										
M-045-13	Interim Completion of Tank S-112 SST Waste Retrieval and Closure	TBD [In accordance with M-045-84 or -85]		X									
M-045-13E	Complete Negotiations for Interim Milestones for Closure of S-112	TBD [In accordance with M-045-84 or -85]		X									

## Fiscal Year 2012 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-062-30	Complete Negotiations Establishing Milestones for Near-Term Actions	10/25/11								X 07/18/11			
M-062-40B	Submit System Plan	10/31/11	10/24/11										
M-062-49	Submit Report to Ecology Demonstrating WTP Design Meets Vit. Criteria	10/31/11	10/27/11										
M-045-91B	Submit a Sampling and Analysis Plan to Ecology	12/30/11	09/20/11										
M-045-92F	Meet Yearly on Performance of Barrier	12/31/11		X									
M-045-91G-T02	Provide AOR Final Doc. For SSTs on 750,000 Gallon Tanks	01/31/12		X									
M-045-91F-T01	Provide Report of the Liquid Leak Rate Assessments	01/31/12			X								
M-062-01X	Submit Semi-Annual Project Compliance Report	01/31/12		X									
M-045-91D	Submit Analytical Test Plan for Cores Removed from C-107 Plug	03/31/12	06/27/11										

### Fiscal Year 2012 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
M-045-91G-T06	Provide Report of the Visual Inspection of 12 SSTs per criteria in M-045-91G-T05	03/31/12		X									
M-045-92M	Barrier 2 Design/Monitoring Approval from Ecology	06/30/12	05/19/11										
M-047-06	Complete Negotiation of No More Than 2 Interim Milestones	06/30/12		X									
M-062-01Y	Submit Semi-Annual Project Compliance Report	07/31/12		X									
M-045-91G-T03	Provide AOR Final Doc for SSTs on 1,000,000 Gallon Tanks	09/30/12		X									

## **WBS 5.2 Retrieve and Close Single Shell Tanks**

**M-045-58, Submit to Ecology for Review and Approval as an Agreement primary document, a phase 2 CMS Master Work Plan, Due: 12/31/08 Status: Complete.**

Master Work Plan is in the Primary document revision process. ORP transmitted its response to Ecology on August 18, 2010. Ecology extended review of comment responses to October 29, 2010. Ecology requested at the October PMM a two week extension from October 27, 2010. ORP acknowledged that Ecology's comment response will be considered in abeyance until DOE-ORP, Ecology, and EPA complete their negotiation of the AIP applicable to Appendix I. Ecology assumed that negotiations would be done December 24, 2010. They have been extended.

**M-045-60, Submit to Ecology for review and approval as an Agreement primary document DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C, Due: 12/31/08, Status: Complete.**

Continue field sampling with decommissioning of angle push under C203 underway. ORP and Ecology met for review of sampling results and draft workplan modifications and sampling optimization strategy on September 22, 2011. September meeting minutes which document efforts were signed 11/09/2011 by parties and will be entered into the administrative record. Identified changes will require a draft workplan modification/SAP with applicable TPA change notice. ORP requests periodic meetings on RFI development effort.

**M-045-56, Complete Implementation of Agreed to Interim Measures, Due: TBD, Status: On schedule.** Annual DOE/Ecology meeting to discuss interim measures for 2011 was held on July 13, 2011, completing milestone M-045-56G. Meeting minutes have been signed by the parties and entered into the TPA administrative record. FY2012 funding constraints may impact FY2012 scheduled work as noted in meeting minutes.

**M-045-59, Control surface water infiltration pathways as needed to control or significantly reduce the likelihood of migration of subsurface contamination to groundwater at the SST WMAS (pending the CMS report, milestone M-45-58, and implementation of other interim corrective measures), Due: TBD, Status: On Schedule**

**M-045-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RFI/CMS Report for WMA C, Due: 12/31/14, Status: On Schedule**

**M-045-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Study Report for WMA C, Due: 06/30/2015, Status: On Schedule**

**M-045-92, DOE and Ecology will establish selection criteria for installation of additional interim barriers at additional WMAs (beyond the T-106 and TY barriers), Due: 9/30/2016, Status: On Schedule.**

**M-045-92K, Barrier 1 Design/Monitoring Approval from Ecology, Due: 6/30/2011, Status: Complete.**

**M-045-92M, Barrier 2 Design/Monitoring Approval from Ecology**, Due: 6/30/2012, Status: Complete. If negotiated, complete installation of 4 additional interim barriers at a rate of one per year, with the first being completed by October 31, 2012. Prior to beginning construction and at least sixteen months before construction is to be complete, DOE will submit to Ecology a final design and monitoring plan for each interim barrier. The barrier design and monitoring plans will be consistent with those developed for WMA T and TY unless DOE and Ecology agree otherwise. Ecology will authorize construction upon approval of these submittals. Ecology letter, 11-NWP-044, dated May 19, 2011, approved the actions associated with these milestones. ORP sent letter 11-TF-064 to ECY on June 15, 2011 to formally close these milestones.

**M-045-92F, DOE and Ecology will meet yearly to review the monitoring data, agree to changes in monitoring (if needed) and assess the performance of the demonstration barrier**, Due: 12/31/2011, Status: On Schedule

**Significant Past Accomplishments:**

1. Automated data collection system for T-Farm interim barrier monitoring continues gathering data.
2. Automated data collection system for TY Interim Barrier monitoring continues gathering data.
3. Continued direct push characterization in C Farm at various planned locations and completed the angled direct push campaign beneath tank C-101
4. Continued remediation technology assessments in support of a Corrective Measures Study for WMA C.
5. Electrical resistivity data was collected from surface and deep electrodes in eastern BY farm and analysis was completed. The report was published in October 2011.
6. Completed direct push campaign in S-farm in support of a future interim barrier.

**Significant Planned Actions in the Next Six Months:**

1. Complete direct push campaign near C-200 tanks in C Farm.
2. Perform additional updates to WMA C RFI/CMS workplan based on requested changes from Ecology.

**Issues:**

- FY2012 funding constraints may impact FY2012 scheduled work. Current baseline leaves the majority of the milestones on schedule pending final Congressional appropriation levels. Changes in appropriated funding and resulting baseline changes will be followed by applicable TPA Change Packages if necessary.



## **SST Retrieval and Closure Program**

**M-045-100, Submit as a primary document a Catch Tank "assumed leak response plan,** Due: 12/27/10, Status: Complete. Transmitted from ORP to ECY via letter 10-TPD-176 on 12/28/10. Ecology issued a Notice of Violation on May 24, 2011, via letter 11-NWP-038, indicating that the deliverable did not fulfill the milestone. The ORP initiated dispute resolution on June 1, 2011 via letter 11-TF-065. ORP also requested an extension of the comment resolution period via letter 11-TF-067. Ecology letter 11-NWP-099 to DOE, dated August 25, 2011, highlighted an ECY/DOE Agreement In Principle for a path forward and extended the due date to October 31, 2011. A revision to the M-45-100 milestone deliverable document was developed collaboratively between ECY and ORP, and was formally transmitted from ORP to ECY on August 29, 2011, via letter 11-TF-090. ECY provided notification that the plan had been approved and the milestone completed on September 26, 2011 via 11-NWP-110. ORP submitted a Motion and Order of Dismissal to the Pollution Control Hearings Board dismissing its appeal on September 29, 2011. The PCHB issued a Motion and Order of Dismissal on October 5, 2011. The milestone and NOV are officially closed out and removed from the issues.

**M-045-101, Submit to Ecology as a primary document a report on all catch tanks and associated pipelines in the SST System Part A,** Due: 12/27/10, Status: Complete. Transmitted from ORP to Ecology via letter 10-TPD-176 on 12/28/10. Comments were transmitted from Ecology to ORP on May 27, 2011, via letter 11-NWP-048. ORP requested 1 extension to the comment resolution period in to December 5 2011. Resolutions have been identified for all comments, and the document is being revised.

**M-045-80, Complete those portions of C-200 Closure Demonstration Plan,** Due: 1/31/2011 Status: Complete. Four primary documents transmitted from ORP to Ecology via letter 10-TPD-166 on 12/28/10. Comments on three of the four documents were transmitted from Ecology to ORP on May 27, 2011, via letters 11-NWP-045, 11-NWP-047, and 11-NWP-051. ORP requested an extension, to December 5, 2011. Ecology requested additional time to review *Radioactive Waste Determination Process Plan for Waste Management Area C Tank Waste Residual* via 11-NWP-049. Three of the four documents have been revised and are in concurrence process.

**M-045-81, Implement & complete all remaining activities in C-200 Closure Demonstration Plan and provide a report of the results of those activities,** Due: 9/30/2014, Status: On Schedule. The first deliverable specified in the closure demonstration plan was formally transmitted from ORP to ECY via letter 10-TPD-166 on 12/28/10. Comments were transmitted from Ecology to ORP on June 1, 2011, via letter 11-NWP-052. ORP requested an extension, to December 5, 2011. Ecology and ORP met on 11/1 and 11/14 to resolve comments.

**M-045-82, Submit complete permit mod requests for Tiers 1, 2, & 3 of the SST,** Due: 9/30/2015 Status: On Schedule

**M-045-84, Complete negotiations of TPA interim MS for closure of second WMA,** Due: 1/31/2017, Status: On Schedule

**M-045-83, Complete the closure of WMA C,** Due: 6/30/2019, Status: On Schedule

**M-045-85, Complete negotiations of TPA interim MS for closure of remaining WMAs, Due: 1/31/2022, Status: On Schedule**

**M-045-70, Complete waste retrieval from all remaining SSTs, Due: 12/31/2040, Status: On Schedule**

**M-045-00, Complete Closure of all Single Shell Tank Farms, Due: 1/31/2043, Status: On Schedule**

**M-045-86, Submit retrieval data report to Ecology for 19 tanks retrieved, Due: TBD (12 months after retrieval certification), Status: On Schedule**

**Significant Past Accomplishments:**

- See discussions above and related discussions in Consent Decree report.

**Significant Planned Activities in the Next Six Months:**

- See discussions above and related discussions in Consent Decree report.
- Work to discuss and resolve issues and comments associated with deliverables for M-45-101, 80, and 81.

**Issues:**

- USDOE is delaying the final numeric modeling supporting the WMA C performance assessment to align the timing with completion of the Tank Closure and Waste Management EIS. Impacts of this delay are being incorporated into the critical path schedules.

## **Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria**

### **Tank 241-C-106**

**Significant Past Accomplishments:**

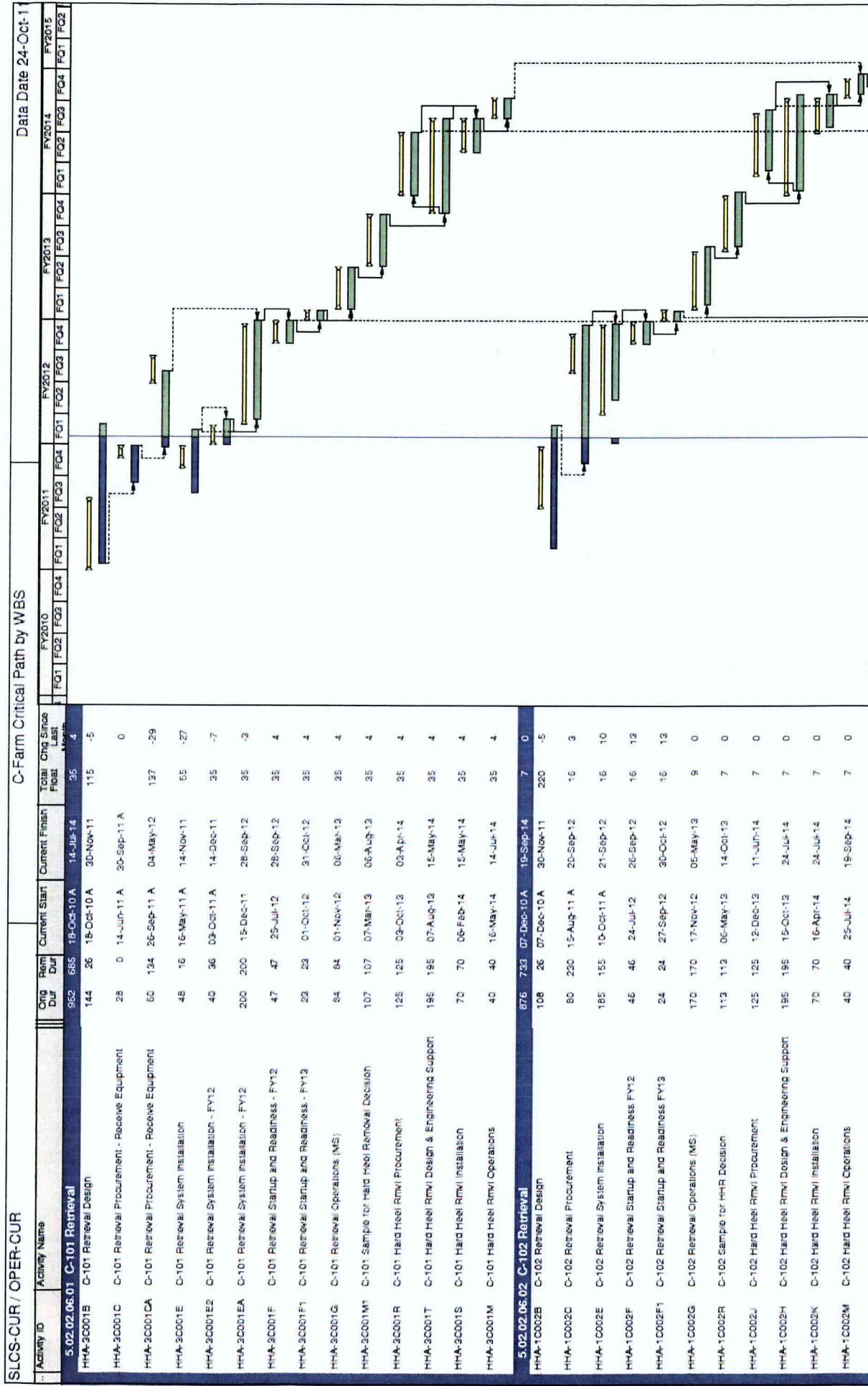
None

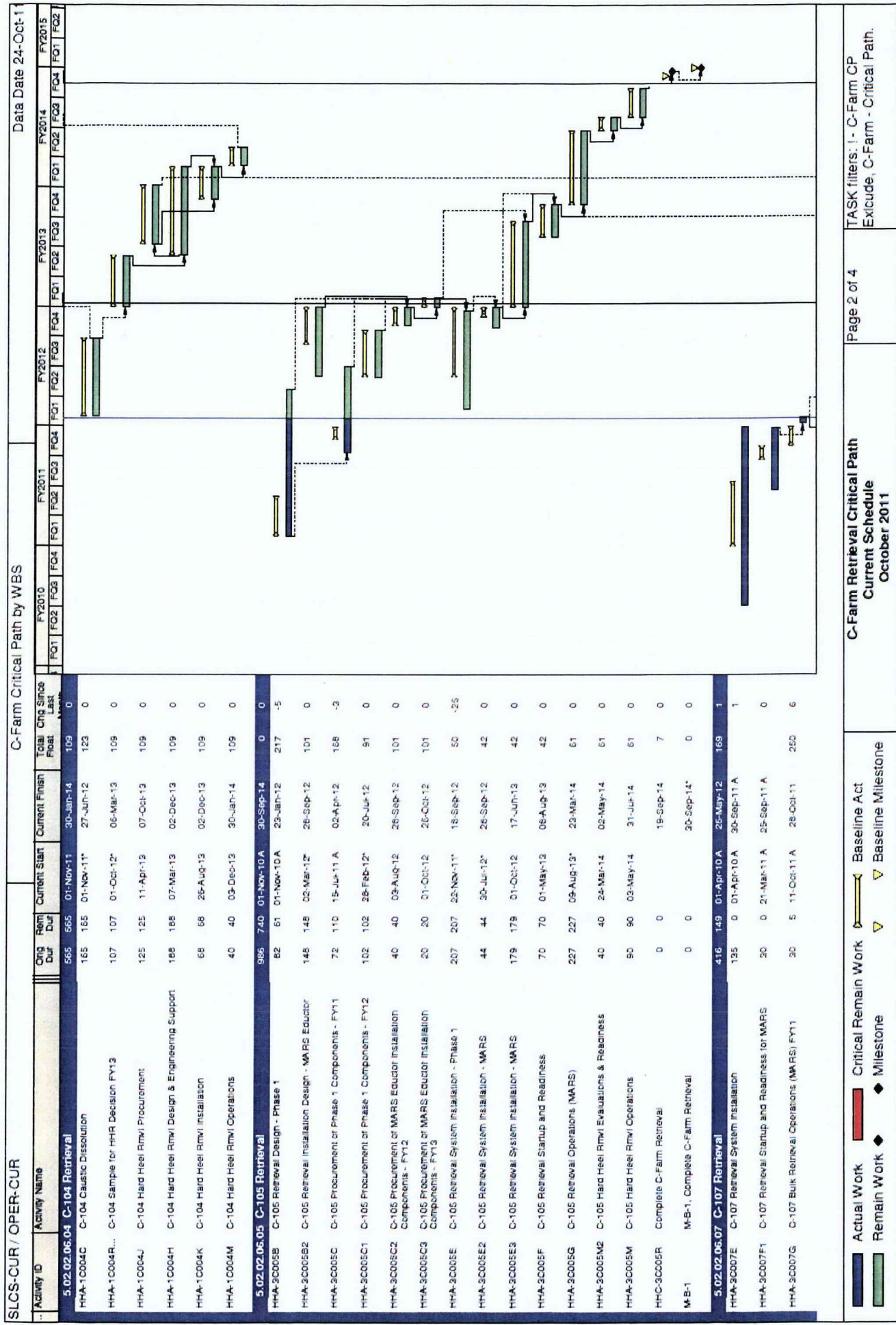
**Significant Planned Activities in the Next Six Months:**

- Continue U.S. Nuclear Regulatory Commission (NRC) review of the C-106 exception request. A Request for Additional Information (RAI) was received from the NRC in February 2009. (It has been discussed with the NRC that much of the additional information requested is dependent upon development of C-Farm residual waste PA and, therefore, cannot be provided until the PA is published.)

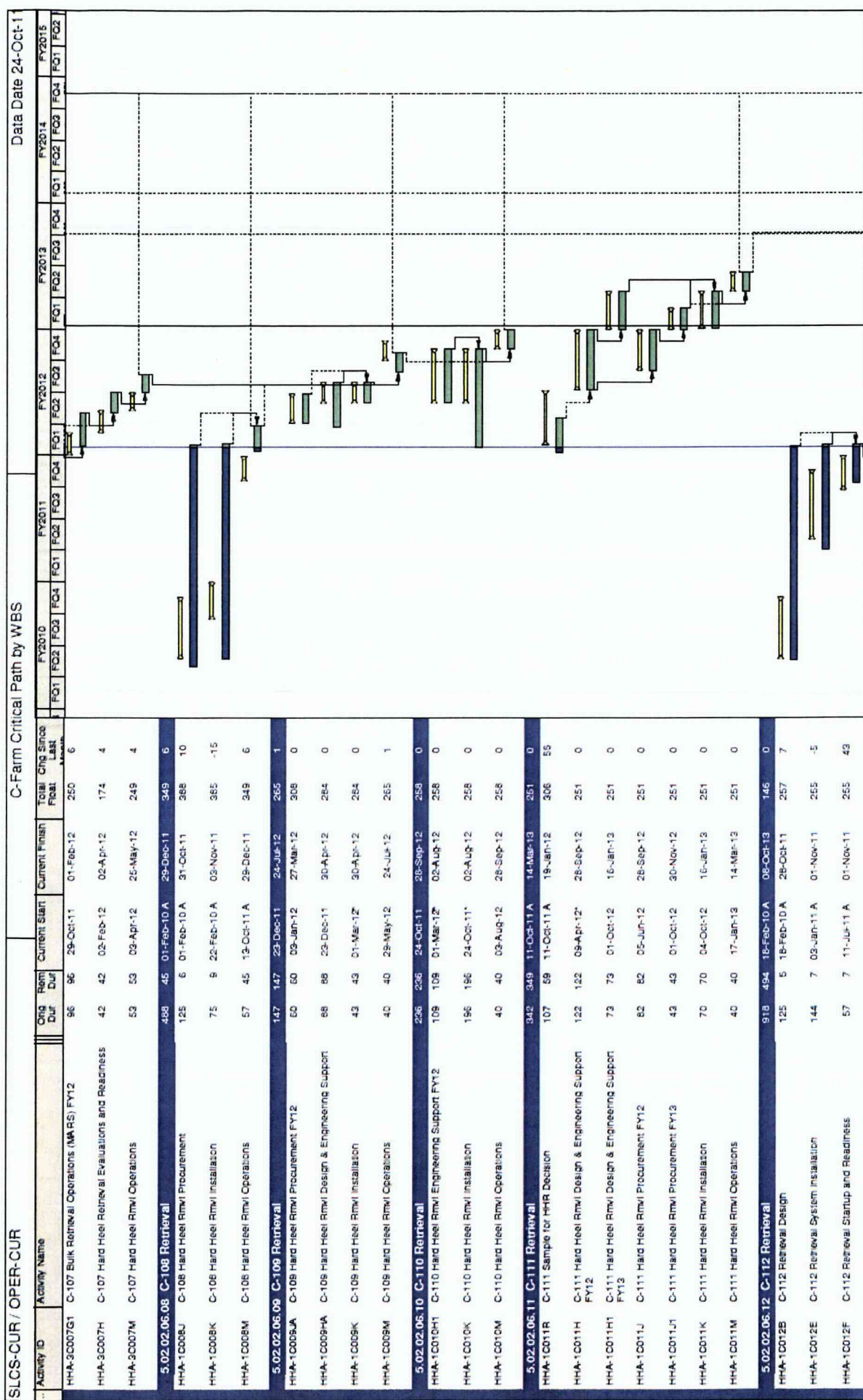
**Issues:**

None







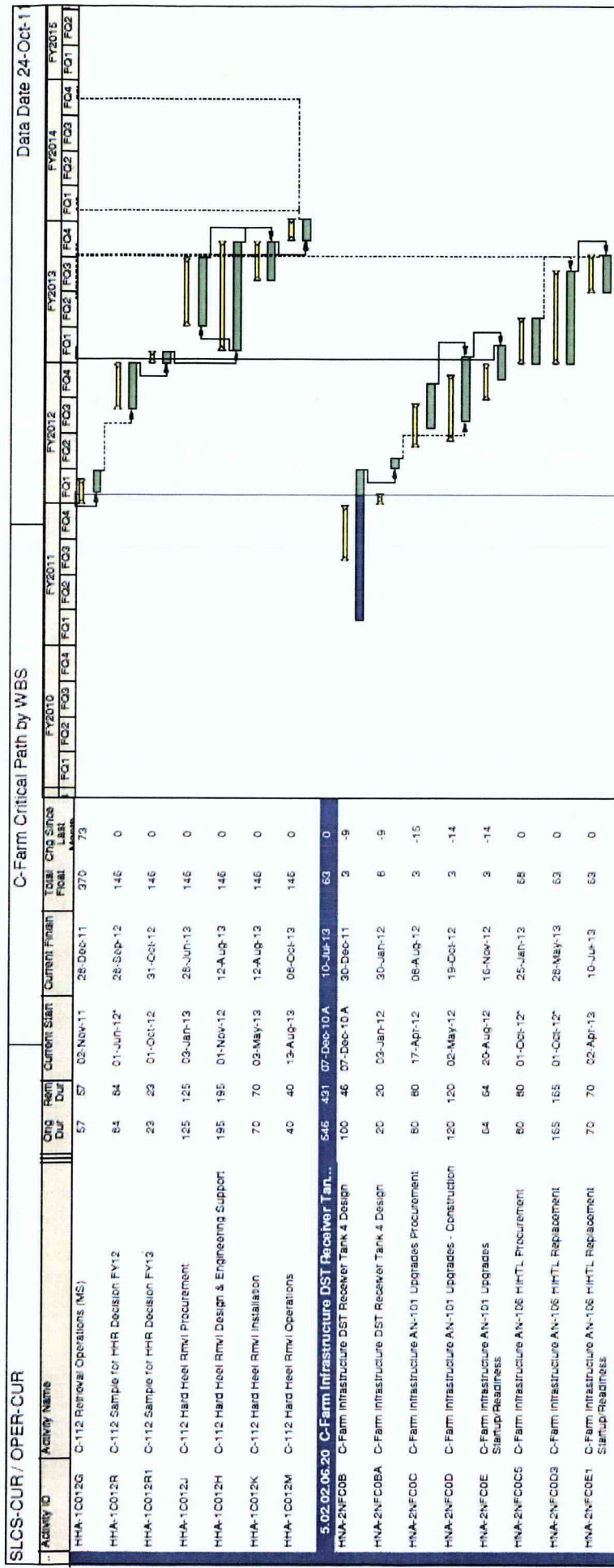


Actual Work Critical Remain Work Baseline Act   
 Remain Work Milestone Baseline Milestone

C-Farm Retrieval Critical Path  
 Current Schedule  
 October 2011

Page 3 of 4

TASK filters: 1 - C-Farm CP  
 Exclude, C-Farm - Critical Path.



Actual Work Remain Work Critical Path Milestone Baseline Act Baseline Milestone

C-Farm Retrieval Critical Path  
Current Schedule  
October 2011

Page 4 of 4

TASK filters: - C-Farm CP  
Exclude, C-Farm - Critical Path.

## **Tank Retrievals with Individual Milestones**

### **Tank 241-A-103**

**M-045-15, Completion of Tank A-103 SST Waste Retrieval**, Due: 9/30/22 Status: On schedule. Change package M-45-11-04 switched tank S-102 to A-103 with a completion date of 09/30/2022 for M-045-15.

**M-045-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**, Due: 9/30/22, Status: On schedule. Updated with A-103 tank and due date of 9/30/22 per M-45-11-04 Change Package.

**M-045-15D, Embedded Milestone, if appropriate, DOE will request an exception to waste retrieval criteria pursuant to Agreement Appendix H**, Due: 9/30/22, Status: On Schedule. Updated with A-103 tank and due date of 9/30/22 per M-45-11-04 Change Package.

#### **Significant Past Accomplishments:**

- Change Package M-45-11-04 was signed by ORP and Ecology on 04/19/11.

#### **Significant Planned Activities in the Next Six Months:**

None

#### **Issues:**

None

### **Tank 241-S-112**

**M-045-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**, Due: TBD (in accordance with M-045-84 or M-045-85), Status: On Schedule

**M-045-13E, Complete Negotiations for Interim Milestones for Closure of S-112**, Due: TBD Status: On Schedule as part of M-045-84 and M-045-85.

#### **Significant Past Accomplishments:**

- Ecology letter of January 7, 2008, concurred with ORP that retrieval of Tank S-112 is complete.

#### **Significant Planned Activities in the Next Six Months:**

None

#### **Issues:**

None

## **Complete Closure of Double Shell Tanks**

**M-042-00A, Complete closure of all double shell tank farms,** Due: TBD, based upon completion of retrieval under M-62-45 plus 5 yrs but no later than 9/30/2052 Status: On Schedule

### **Significant Past Accomplishments:**

None

### **Significant Planned Actions in the Next Six Months:**

None

### **Issues:**

None



## 242-A Evaporator Status (previously reported under Milestone M-48, which has been closed out)

### 242-A Campaign strategy:

No campaigns were conducted in FY2011 due to ongoing 242-A and Tank Farm Life Extension and ARRA funded facility upgrades. The 242-A Campaign Strategy for FY2010 through FY2015 depicted below has been updated based on ORP-11242, River Protection Project Plan, Revision 6, and ongoing schedule integration efforts.

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY10	10-01	AW-106	AW-106	Campaigns 10-01/10-02 were performed back-to back starting in late August and completing in early October 2010. Campaign 10-02 was an acceleration of previously planned Campaign 11-01.
FY10	10-02	AW-106	AW-106	
FY11	NA	NA	NA	No campaign conducted in FY11 due to ongoing 242-A and Tank Farm facility life extension and ARRA funded upgrades.
FY12	12-01	AP-107	AP-107	Estimated start August 2012. May require two (2) passes to achieve waste volume reduction.
FY13	13-01	AP-104	AP-107	Estimated start March 2013.
FY13	13-02-	AW-106	AP-107	Estimated start September 2013.
FY14	14-01	AN-106 AZ-102 AW-106	AP-107	Estimated start March 2014. Two (2) passes required.
FY15	15-01	AY-101 AZ-102	AP-107	Estimated start March 2015. Three (3) passes required.
FY15	15-02	AY-101	AP-107	Estimated start August 2015. Four (4) passes required.

## **SST Integrity Assurance**

**M-045-91G-T05, Provide to Ecology a report documenting and evaluating the visual inspection of 12 SSTs per the criteria listed in Table 3.3 in RPP-PLAN-46847, Rev.0, Due: 3/31/2011, Status: Complete 03/11/11 (Letter 11-TF-039). Ecology completed review and sent an approval letter stating ORP had met this milestone on 5/12/2011. (Letter 11-NWP-041)**

**M-045-91C, implement the DQO process to develop and provide Ecology a Test Plan to evaluate the chemistries as specified in RPP-RPT-43 116. Rev 0, Due: 9/30/2011, Status: Complete 09/15/11 (Letter 11-TPD-057).**

**M-045-91G-T01, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 530, 000 gallon tanks (B, BX. C, T and U Farms), Due: 9/30/2011, Status: Complete 09/15/11 (Letter 11-TPD-064).**

**M-045-91B, Submit a Sampling and Analysis Plan to Ecology for the sampling of sidewall cores from tank 241-A-106 or alternate tank approved by Ecology, Due: 12/30/2011, Status: Complete 09/20/11 (Letter 11-TPD-069).**

**M-045-91F-T01, Provide to Ecology as a HFFACO secondary document a report evaluating the applicability to Hanford SSTs of the liquid leak rate assessments of sludge and salt-cake from the Savannah River Site, Due: 1/31/2012, Status: At risk.**

**M-045-91G-T02, provide to Ecology the Structural Analyses of Record final documentation for SSTs for 750,000 gallon tanks (BY, S, TX and TY Farms), Due: 1/31/2012, Status: On Schedule**

**M-045-91D, Submit to Ecology an analytical test plan for the cores removed from the C-107 plug, Due: 3/31/2012, Status: Complete 06/27/11. ORP letter 11-TPD-043 transmitted the test plan to Ecology on June 27, 2011. (Letter 11-NWP-077)**

**M-045-91G-T06, Provide to Ecology a report documenting and evaluating the visual inspection of 12 SSTs per the criteria in M-045-91G-T05, Due: 3/31/2012, Status: On schedule pending final appropriations.**

**M-045-91G-T03, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 1,000,000 gallon tanks (A, AX and SX Farms), Due: 9/30/2012, Status: On schedule pending final appropriations.**

**M-045-91D-T01, Provide Ecology a report containing the results and interpretation of testing, and analysis performed on the concrete dome samples obtained from the Tank C-107 plug, Due: 5/31/2013, Status: On schedule pending final appropriations.**

**M-045-91F-T03, Provide to Ecology, as a HFFACO secondary document a report assessing the feasibility of testing for ionic conductivity between the inside and outside of SSTs, Due: 5/31/2013, Status: On schedule pending final appropriations.**

**M-045-91F-T04, provide to Ecology, as a HFFACO secondary document, a report on the 100-series single-shell tanks which have been or will be identified as having leaked in RPP-32681, Rev 0, Due: 7/31/2013, Status: On schedule pending final appropriations.**

**M-045-91F-T02, Provide to Ecology as a HFFACO secondary document a report evaluating the common factors of liner failures for SSTs that have leaked and will provide recommendations as appropriate, such as enhanced Leak Detection, Monitoring, and Mitigation, Due: 7/31/2013, Status: On schedule pending final appropriations.**

**M-045-91E, Provide to Ecology a compilation of the Single-Shell Tank farms dome deflection surveys every two years, beginning 9/30/2013, Due: 9/30/2013, Status: On schedule pending final appropriations.**

**M-045-91G-T04, provide to Ecology the Structural Analyses of Record final documentation for SSTs for 55,000 gallon tanks (B, C, T and U Farms), Due: 10/31/2013, Status: On schedule pending final appropriations.**

**M-045-91F, Provide to Ecology a report (Summary Conclusions Report on Leak Integrity) summarizing and evaluating the information submitted under M-045-91F-T01 through -T04, Due: 12/31/2013, Status: On schedule pending final appropriations.**

**M-045-91G, Provide a Summary Conclusions Report of Structural Analysis of Record (AOR) for SSTs, Due: 4/30/2014, Status: On schedule pending final appropriations.**

**M-045-91B-T01, Provide Ecology a report containing the results and interpretation of testing. and analysis, performed on the concrete core obtained from Tank A- 106 or alternate tank, Due: 9/30/2014, Status: On schedule pending final appropriations.**

**M-045-91H, Submit a change package (if deemed necessary by DOE and Ecology) to establish additional milestones based on information obtained from the actions in the preceding M-045-91 series milestones to date, Due: 7/31/2015, Status: On schedule pending final appropriations.**

**M-045-91I, Provide to Ecology an IQRPE certification of SSTs structural integrity for the remainder of the mission, or for such time as the IQRPE believes he/she can reasonably certify, Due: 9/30/2018, Status: On schedule pending final appropriations.**

#### **Significant Past Accomplishments:**

- Specimens for the M-045-91D milestone have been tested for mechanical properties by CTL in Skokie, Illinois. Vendor test report has been prepared.
- Issued RPT-RPP-50714, *Demonstration Report for Single-Shell Tank Sidewall Coring Project*, on 10/4/2011.

#### **Significant Planned Actions in the Next Six Months:**

- Complete milestone M-045-91F-T03, plan to provide Ecology, Ionic Conductivity Feasibility

Report in September 2011. Due: 5/31/2013.

- Complete milestone M-045-91G-T02, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 750, 000 gallon tanks (BY, S. TX, and TY Farms), planned submittal to Ecology in November 2011. Due: 1/31/2012.
- Prepare and issue demonstration test report for the sidewall coring demonstration to support M-045-91B-T01.

**Issues:**

- FY12 funding constraints have placed FY12 work supporting SST Integrity Assurance program in question. Current baseline leaves the majority of the milestones on schedule pending final appropriation levels. Changes in appropriated funding and resulting baseline changes will be followed by applicable TPA Change Packages if necessary.

## **In Tank Characterization and Summary**

For the period from October 1 – October 31, 2011:

### **Accomplishments:**

- Initiated sampling per RPP-PLAN-49885, *Tank Sampling and Analysis Plan for 241-C-108 Hard Heel Dissolution*, on October 24. Sampling and laboratory analysis to support the heel retrieval will continue into November.

### **Planned Action within the next Six Months:**

- Tank Sampling
  - Continue to sample C-108 in November to support heel retrieval.
  - Tank 241-AN-106 grab samples for chemistry control taken at 50% of the retrieval of tank 241-C-107 scheduled for December 2011.
  - Tank 241-AN-101 grab samples for chemistry control taken at 50% of the retrieval of tank 241-C-112 scheduled for December 2011.
  - Tank 204-AR-TK-1 compatibility samples scheduled for January 2012.
  - Tank 241-AW-106 evaporator samples scheduled for February 2012.
  - Tank 241-AP-104 evaporator samples scheduled for February 2012.
  - Tank 241-AZ-102 grab samples for chemistry control scheduled for March 2012.
  - Tank 241-C-108 off riser samples scheduled for February 2012.
  - Tank 241-C-107 off riser samples scheduled for April 2012.
- BBI Updates
  - Ten tanks have been identified for updates in FY12 Quarter1.
- Data Quality Objectives (DQO)
  - Revision of the PCB Management DQO (RPP-7614) and the Compatibility DQO (HNF-SD-WM-DQO-001) in December 2011.
  - Revision of the Strategic Planning DQO (RPP-44057) in December 2011.

### **Issues:**

None

## TANK OPERATIONS CONTRACT (TOC) OVERVIEW

### Project Performance

The earned value analysis is a comparison of cost and schedule contract-to-date performance. The earned value performance reporting reflects the format, Work Breakdown Structure (WBS) reporting levels, and variance thresholds as agreed to with the Tank Farms Operations Contractor (TOC) for monthly performance reporting. The earned value analysis is not intended to be a measurement of performance against existing Tri-Party Agreement Milestones.

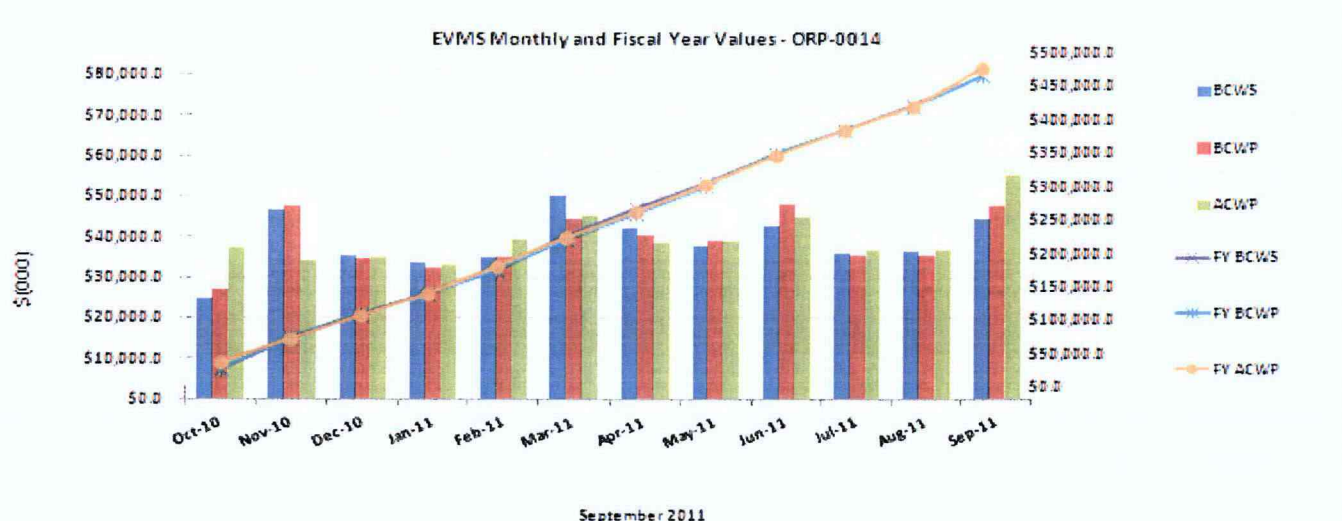
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	44,378.0	47,338.5	55,091.7	2,960.6	(7,753.2)	1.07	0.86			
FYTD	465,111.8	465,816.1	471,007.3	704.3	(5,191.2)	1.00	0.99	465,111.8	471,007.3	(5,895.5)
CTD	1,225,167.5	1,219,049.8	1,163,130.2	(6,117.7)	55,919.6	1.00	1.05	2,115,721.5	2,068,335.3	52,486.2

Red shaded cells indicates a SPI/CPI less than 0.90

Green shaded cells indicate a SPI/CPI between 0.90 and 0.99

Blue shaded cells indicate a SPI/CPI greater than or equal to 1.0

### Current Month Significant Variance Contributors

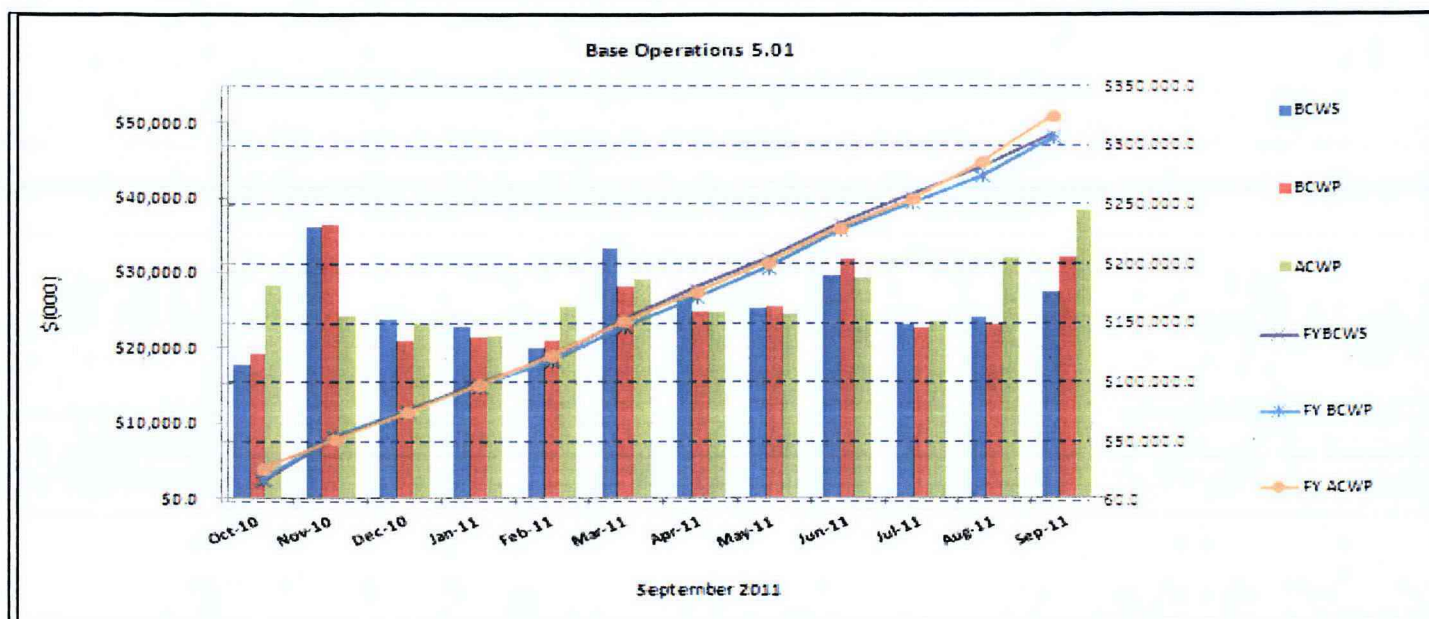


Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-10	\$24,918.8	\$26,782.0	\$37,083.6	1.07	0.72	\$24,918.8	\$26,782.0	\$37,083.6	1.07	0.72
Nov-10	\$46,528.0	\$47,510.9	\$34,301.0	1.02	1.39	\$71,446.8	\$74,292.9	\$71,384.5	1.04	1.04
Dec-10	\$35,469.5	\$34,558.3	\$35,056.5	0.97	0.99	\$106,916.3	\$108,851.1	\$106,441.0	1.02	1.02
Jan-11	\$33,862.5	\$32,115.2	\$33,376.8	0.95	0.96	\$140,778.8	\$140,966.4	\$139,817.8	1.00	1.01
Feb-11	\$35,157.1	\$34,800.5	\$39,288.6	0.99	0.89	\$175,935.9	\$175,766.8	\$179,106.4	1.00	0.98
Mar-11	\$50,219.3	\$44,202.5	\$45,098.7	0.88	0.98	\$226,155.2	\$219,969.3	\$224,205.1	0.97	0.98
Apr-11	\$42,344.0	\$40,218.8	\$38,772.0	0.95	1.04	\$268,499.2	\$260,188.1	\$262,977.1	0.97	0.99
May-11	\$37,492.6	\$39,240.0	\$38,843.5	1.05	1.01	\$305,991.8	\$299,428.1	\$301,820.6	0.98	0.99
Jun-11	\$42,816.6	\$48,027.1	\$44,871.5	1.12	1.07	\$348,808.4	\$347,455.2	\$346,692.1	1.00	1.00
Jul-11	\$35,958.2	\$35,669.0	\$36,839.3	0.99	0.97	\$384,766.6	\$383,124.2	\$383,531.4	1.00	1.00
Aug-11	\$36,193.5	\$35,353.3	\$36,839.3	0.98	0.96	\$420,960.1	\$418,477.5	\$420,370.7	0.99	1.00
Sep-11	\$44,378.0	\$47,338.5	\$55,091.7	1.07	0.86	\$465,338.1	\$465,816.0	\$475,462.4	1.00	0.98
CTD	\$1,225,167.5	\$1,219,049.8	\$1,163,130.2	1.00	1.05					

- **Effective through September 30, 2011** – The overall project performance is going very well; SPI is 1.00 with a CPI of 1.05; thus – ORP 0014 is on schedule and under budget.



Office of River Protection (ORP-0014) Fiscal Year 2011 - Monthly EVMS



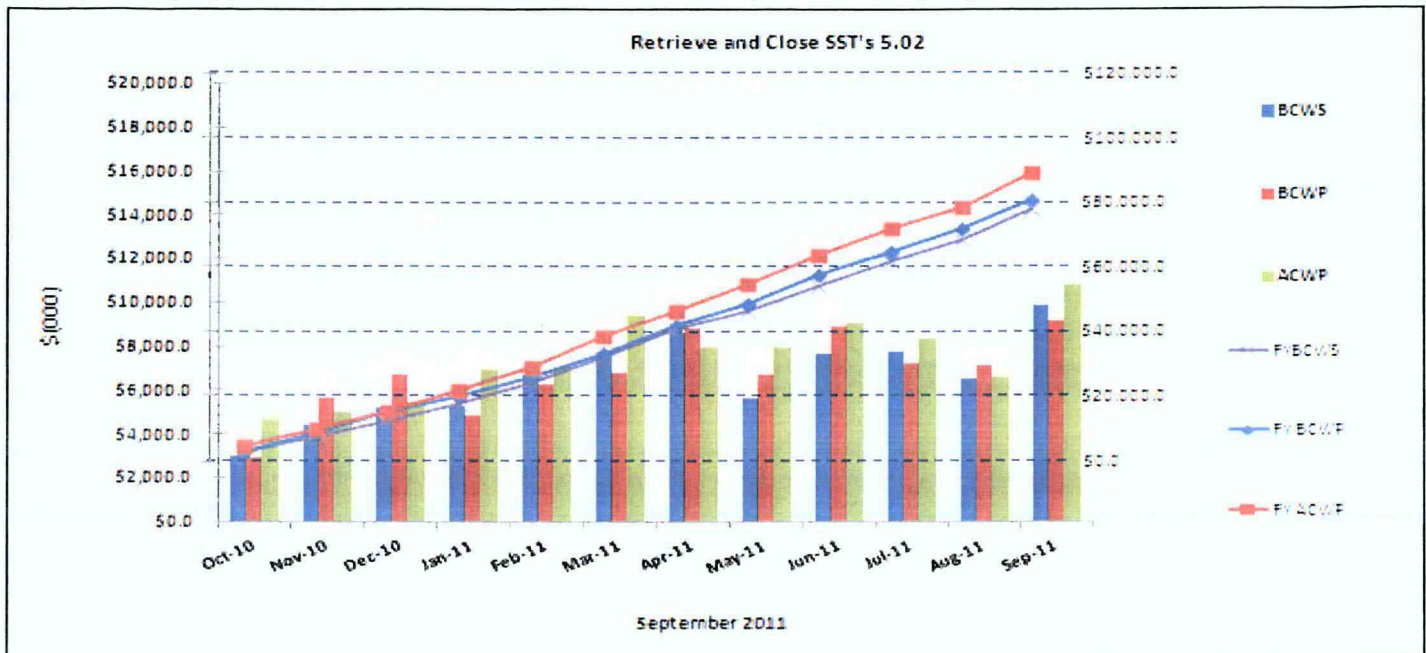
Earned Value Month	BCWS	BCVP	ACWP	SPI	CPI	FYBCWS	FY BCVP	FY ACWP	FY SPI	FY CPI
Oct-10	\$17,777.2	\$19,285.1	\$28,549.6	1.08	0.68	\$17,777.2	\$19,285.1	\$28,549.6	1.08	0.68
Nov-10	\$36,143.1	\$36,366.3	\$24,452.2	1.01	1.49	\$53,920.3	\$55,651.4	\$53,001.8	1.03	1.05
Dec-10	\$23,775.6	\$20,995.7	\$23,448.8	0.88	0.90	\$77,695.9	\$76,647.1	\$76,450.6	0.99	1.00
Jan-11	\$22,876.6	\$21,370.0	\$21,705.1	0.93	0.98	\$100,572.5	\$98,017.1	\$98,155.7	0.97	1.00
Feb-11	\$20,031.0	\$21,023.0	\$25,607.6	1.05	0.82	\$120,603.5	\$119,040.1	\$123,763.3	0.99	0.96
Mar-11	\$33,329.2	\$28,292.6	\$29,059.6	0.85	0.97	\$153,932.7	\$147,332.7	\$152,822.9	0.96	0.96
Apr-11	\$26,817.9	\$24,728.9	\$24,769.1	0.92	1.00	\$180,750.6	\$172,061.6	\$177,592.0	0.95	0.97
May-11	\$25,422.8	\$25,669.7	\$24,548.6	1.01	1.05	\$206,173.4	\$197,731.3	\$202,140.6	0.96	0.98
Jun-11	\$29,540.0	\$31,789.1	\$29,306.5	1.08	1.08	\$235,713.4	\$229,520.4	\$231,447.1	0.97	0.99
Jul-11	\$23,168.0	\$22,540.5	\$23,499.9	0.97	0.96	\$258,881.4	\$252,060.9	\$254,947.0	0.97	0.99
Aug-11	\$24,131.4	\$23,132.4	\$31,992.7	0.96	0.72	\$283,012.8	\$275,193.3	\$286,939.7	0.97	0.96
Sep-11	\$27,406.0	\$31,992.7	\$38,357.7	1.17	0.83	\$310,418.8	\$307,186.0	\$325,297.4	0.99	0.94

CTD	\$823,183.9	\$821,519.3	\$798,196.2	1.00	1.03
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- **242-A Evaporator Operation and Maintenance, \$225k: CM (SV)** schedule recovery on the evaporator maintenance activities \$70k and factory acceptance testing for the operator training simulator \$155k.
- **DST to DST Transfer \$803k: CM (SV)** point adjustment for implementation of BCR RPP-11-238, "FY 2011 Activity Deletions," which deleted two DST-to-DST transfers and three AP Farm level rise/leak checks from the FY 2011 baseline.
  - These deletions resulted in a CM BCWS of (\$738k), which accounts for a majority of the variance. The deleted scope could not be performed in FY 2011 because of a pending resolution on the primary transfer line piping code compliance issue.
  - The FY 2011 deleted work was re-planned in FY 2012 via BCR RPP-11-222, "Fiscal Year 2012 Work Scope Re-Plan."
- **RA-Exhauster Upgrades, (\$738k): CM (SV)** performance "give-back" for work completed earlier than planned on fabrication of the new AP and SY Farm exhausters. This work is now complete.



## Office of River Protection (ORP-0014) Fiscal Year 2011 - Monthly EVMS

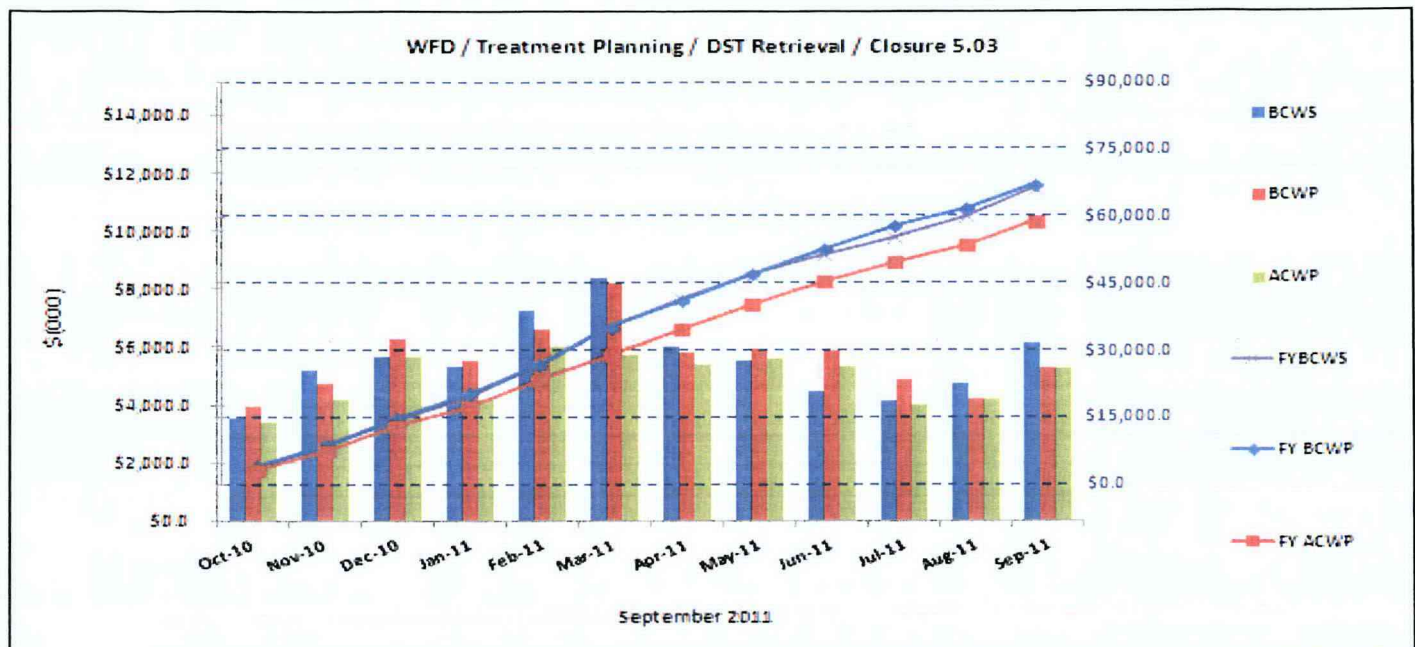


Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-10	\$2,991.6	\$2,932.6	\$4,707.6	0.98	0.62	\$2,991.6	\$2,932.6	\$4,707.6	0.98	0.62
Nov-10	\$4,412.7	\$5,622.7	\$5,006.7	1.27	1.12	\$7,404.3	\$8,555.3	\$9,714.3	1.16	0.88
Dec-10	\$5,209.7	\$6,682.7	\$5,494.0	1.28	1.22	\$12,614.0	\$15,238.0	\$15,208.3	1.21	1.00
Jan-11	\$5,310.0	\$4,820.2	\$6,975.6	0.91	0.69	\$17,924.0	\$20,058.2	\$22,183.9	1.12	0.90
Feb-11	\$6,670.0	\$6,253.2	\$7,006.6	0.94	0.89	\$24,594.0	\$26,311.4	\$29,190.5	1.07	0.90
Mar-11	\$7,513.3	\$6,825.3	\$9,447.6	0.91	0.72	\$32,107.3	\$33,136.7	\$38,638.1	1.03	0.86
Apr-11	\$8,613.5	\$8,766.1	\$7,914.2	1.02	1.11	\$40,720.8	\$41,902.8	\$46,552.3	1.03	0.90
May-11	\$5,638.9	\$6,687.7	\$7,937.1	1.19	0.84	\$46,359.7	\$48,590.5	\$54,489.4	1.05	0.89
Jun-11	\$7,638.7	\$8,905.0	\$9,080.1	1.17	0.98	\$53,998.4	\$57,495.5	\$63,569.5	1.06	0.90
Jul-11	\$7,729.6	\$7,211.9	\$8,335.0	0.93	0.87	\$61,728.0	\$64,707.4	\$71,904.5	1.05	0.90
Aug-11	\$6,480.9	\$7,117.4	\$6,587.0	1.10	1.08	\$68,208.9	\$71,824.8	\$78,491.5	1.05	0.92
Sep-11	\$9,874.9	\$9,124.1	\$10,840.9	0.92	0.84	\$78,083.8	\$80,948.9	\$89,332.4	1.04	0.91
CTD	\$239,346.8	\$235,302.2	\$231,825.8	0.98	1.01					

- C-112 Retrieval, \$650k:** CM (SV) schedule recovery on the SST C-112 retrieval system procurement and installation (\$1,071k), which is partially offset by an unfavorable SV in startup and readiness of (\$435k) due to resource constraints that delayed the completion of construction. Procurement and construction are now complete.
- C-107 Retrieval (\$1,204k):** CM (CV) driven by three root causes:
  - Overruns for installation of the MARS related to unplanned repair of the constant tension hoist, adverse weather conditions, and wiring repairs during construction acceptance testing (\$889k);
  - Overruns in the SST C-107 exhauster refurbishment due to the unplanned removal of the SST C-110 demister required for installation of the SST C-107 demister (\$206k);
  - Overruns on retrieval operations (no BCWP earned in the CM) as the start of operations was attempted later than planned and issues were encountered with the hydraulic power unit speed control (\$169k). The retrieval system installation and exhauster refurbishment work are complete.



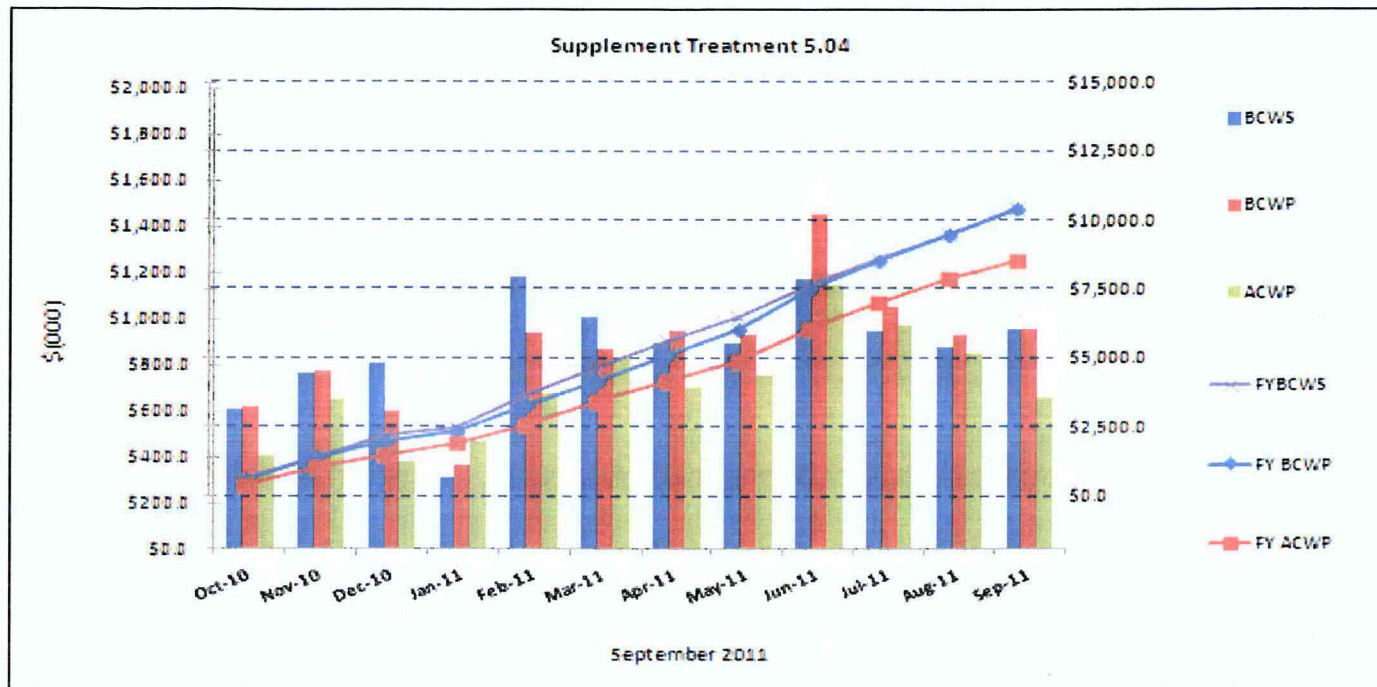
## Office of River Protection (ORP-0014) Fiscal Year 2011 - Monthly EVMS



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-10	\$3,540.0	\$3,944.3	\$3,413.8	1.11	1.16	\$3,540.0	\$3,944.3	\$3,413.8	1.11	1.16
Nov-10	\$5,203.6	\$4,748.8	\$4,184.7	0.91	1.13	\$8,743.6	\$8,693.1	\$7,598.5	0.99	1.14
Dec-10	\$5,677.1	\$6,277.7	\$5,689.4	1.11	1.10	\$14,420.7	\$14,970.8	\$13,287.9	1.04	1.13
Jan-11	\$5,366.1	\$5,557.1	\$4,225.6	1.04	1.32	\$19,786.8	\$20,527.9	\$17,513.5	1.04	1.17
Feb-11	\$7,269.3	\$6,582.6	\$5,993.5	0.91	1.10	\$27,056.1	\$27,110.5	\$23,507.0	1.00	1.15
Mar-11	\$8,362.9	\$8,213.8	\$5,757.0	0.98	1.43	\$35,419.0	\$35,324.3	\$29,264.0	1.00	1.21
Apr-11	\$6,011.0	\$5,778.2	\$5,384.6	0.96	1.07	\$41,430.0	\$41,102.5	\$34,648.6	0.99	1.19
May-11	\$5,533.4	\$5,946.3	\$5,595.9	1.07	1.06	\$46,963.4	\$47,048.8	\$40,244.5	1.00	1.17
Jun-11	\$4,456.7	\$5,875.8	\$5,335.3	1.32	1.10	\$51,420.1	\$52,924.6	\$45,579.8	1.03	1.16
Jul-11	\$4,110.8	\$4,859.5	\$4,024.3	1.18	1.21	\$55,530.9	\$57,784.1	\$49,604.1	1.04	1.16
Aug-11	\$4,703.9	\$4,173.4	\$4,181.9	0.89	1.00	\$60,234.8	\$61,957.5	\$53,786.0	1.03	1.15
Sep-11	\$6,135.3	\$5,258.9	\$5,267.6	0.86	1.00	\$66,370.1	\$67,216.4	\$59,053.6	1.01	1.14
CTD	\$149,280.3	\$148,871.8	\$121,759.7	1.00	1.22					

- RA-Exhauster Upgrades, (\$539k):** CM (SV) related to AP and SY Farms' exhauster upgrades and driven by two root causes:
  - Correction of August accrual error resulting in CM accrual of an additional (\$300k),
  - Additional subcontract and engineering labor support for fan specification design changes (\$235k). This work is now complete.
- RA-Electrical Upgrades \$887k:** related to SST and SY Farm electrical upgrades and is driven by two root causes:
  - Partial schedule recovery for completion of material purchases on the T/TX/TY Farms' electrical upgrades, and schedule recovery for waste disposal for the S/SX Farms' electrical upgrades \$294k; schedule recovery on site preparation, fabrication, and installation of the SY Farm POC \$220k;
  - CM adjustment for implementation of RPP-11-243, "RA-Closeout for Tank Farm Projects," FY 2011 RA works on the SST electrical upgrades to base contract-funded accounts in FY 2012 \$373k. CM BCWS for the RA SST electrical systems upgrades is (\$373k), thus generating a favorable SV.

## Office of River Protection (ORP-0014) Fiscal Year 2011 - Monthly EVMS



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FYBCWP	FYACWP	FY SPI	FY CPI
Oct-10	\$610.0	\$619.9	\$412.6	1.02	1.50	\$610.0	\$619.9	\$412.6	1.02	1.50
Nov-10	\$768.6	\$773.1	\$657.3	1.01	1.18	\$1,378.6	\$1,393.0	\$1,069.9	1.01	1.30
Dec-10	\$807.0	\$602.2	\$384.2	0.75	1.57	\$2,185.6	\$1,995.2	\$1,454.1	0.91	1.37
Jan-11	\$309.8	\$368.0	\$470.6	1.19	0.78	\$2,495.4	\$2,363.2	\$1,924.7	0.95	1.23
Feb-11	\$1,186.8	\$941.8	\$680.9	0.79	1.38	\$3,682.2	\$3,305.0	\$2,605.6	0.90	1.27
Mar-11	\$1,013.9	\$870.9	\$834.5	0.86	1.04	\$4,696.1	\$4,175.9	\$3,440.1	0.89	1.21
Apr-11	\$901.6	\$945.5	\$704.0	1.05	1.34	\$5,597.7	\$5,121.4	\$4,144.1	0.91	1.24
May-11	\$897.5	\$936.3	\$761.9	1.04	1.23	\$6,495.2	\$6,057.7	\$4,906.0	0.93	1.23
Jun-11	\$1,180.7	\$1,457.2	\$1,149.5	1.23	1.27	\$7,675.9	\$7,514.9	\$6,055.5	0.98	1.24
Jul-11	\$949.9	\$1,057.1	\$979.8	1.11	1.08	\$8,625.8	\$8,572.0	\$7,035.3	0.99	1.22
Aug-11	\$877.3	\$930.1	\$850.5	1.06	1.09	\$9,503.1	\$9,502.1	\$7,885.8	1.00	1.20
Sep-11	\$961.7	\$962.8	\$661.5	1.00	1.46	\$10,464.8	\$10,464.9	\$8,547.3	1.00	1.22

CTD	\$13,356.5	\$13,356.5	\$11,348.5	1.00	1.18
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- **WTP Pre-Treatment Alternative Studies, \$300k:** CM (CV) cost efficiencies realized from self-performing WTP technology development baseline studies, reducing subcontractor cost with less than expected labor.



## **Acquisition of New Facilities**

**M-090-11, Complete the Negotiation of No More Than Two Canister Storage Facility Construction Interim Milestones**, Due: 12/31/12, Status: On Schedule. Negotiations are not yet underway.

**M-090-00, Acquire/modify facilities for storage of IHLW**, Due: 12/31/2019, Status: On Schedule

**M-047-06, Complete negotiation of no more than two interim milestones governing work necessary to support completion of M-047-00**, Due: 06/30/12, Status: Negotiations are not yet underway.

**M-047-00, Complete Work Necessary to provide facilities for management of secondary waste from the WTP**, Due: 12/31/2022, Status: On Schedule

### **Significant Past Accomplishments:**

Conceptual Design activities continue on the Interim Hanford Storage and Secondary Waste Treatment Projects.

The Interim Hanford Storage Project conducted a three day Process Hazards Analysis the week of October 31, 2011. Nine Hazard Evaluation Study nodes were identified to evaluate hazards, and the level of hazard throughout design, process and operation of the project. Areas addressed included hazardous materials, operating and maintenance hazards and planned non-operational activities (system reconfiguration, connect/disconnect). In addition, equipment failures, off-normal and upset conditions including the effects of natural and external events were evaluated. There were no significant hazards that were identified at the meeting.

The Secondary Waste Treatment Project conducted a three day Value Engineering (VE) session the week of October 24, 2011. The session reviewed test results from PNNL, data packages from ARES and the PNNL Independent Review Panel report. The outcome of the VE session was the selection of Cast Stone as the preferred waste form for solidification of the secondary liquid waste. Cast Stone was selected based on the selection criteria, the data packages presented by ARES and the testing done to date by PNNL. ORP, WRPS and PNNL have developed a detailed presentation of the Secondary Waste Treatment Project and Waste Form Testing and have offered to present this data to Ecology.

ORP initiated discussions with Ecology to identify the challenges of simultaneous permitting for Interim Hanford Storage and Secondary Waste Treatment projects.

### **Significant Planned Actions in the Next Six Months:**

- Continue Conceptual Design for both the Interim Hanford Storage and Secondary Waste Treatment Project.

- Issue the Value Engineering Report for the Secondary Waste Treatment Project.
- Issue the Process Hazard Analysis Report for the Interim Hanford Storage Project.
- Conduct Value Engineering session for the Interim Hanford Storage Project.

**Issues:**

None

## **Supplemental Treatment and Part B Permit Applications**

**M-062-40ZZ, Submit a one-time Tank Waste Supplemental Treatment Technologies report if a supplemental treatment technology is proposed other than a 2nd LAW, Due: 10/31/2014, Status: On Schedule.**

**M-062-45ZZ, Negotiate a one-time supplemental treatment selection, Due: 4/30/2015, Status: On schedule. Negotiations are not yet underway.**

**M-062-45ZZ-A, Convert M-062-31-T01 through M-062-34-T01 to Interim Milestones, Due: 4/30/2015, Status: On Schedule.**

**M-062-31-T01, Complete final design and submit RCRA Part B permit mod request, Due: 4/30/2016, Status: On schedule**

**M-062-32-T01, Start construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2018, Status: On schedule**

**M-062-33-T01, Complete construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2021, Status: On schedule**

**M-062-45XX, No later than 12/31/2021, the DOE and Ecology shall complete negotiations to establish a mechanism that will apply to resolve future disputes regarding the determinations in M-062-45, paragraphs 4 and 5, due: 12/31/2021, Status: On Schedule**

**M-062-34-T01, Complete hot commissioning of supplemental vitrification treatment facility and/or WTP enhancements, Due: 12/30/2022, Status: On schedule**

**M-062-21, Annually, submit data that demonstrates operation of the WTP, Due: 2/28/2023, Status: On Schedule**

**M-062-00, Complete Pretreatment Processing and Vitrification of HLW and LAW Tank Wastes, Due: 12/31/2047, Status: On Schedule**

### **Significant Past Accomplishments:**

- ORP and Ecology signed change package M-62-11-01 on 7/18/11, deleting milestone M-62-30.

### **Significant Planned Actions in the Next Six Months:**

None

### **Issues:**

None

## **System Plan**

**M-062-40B, Submit a system plan describing the disposition of all tank waste managed by ORP, Due: 10/31/2011, Status: Completed 10/24/2011 via DOE-ORP/ECY joint signature letter 11-TPD-087.**

**M-062-40C, Select a minimum of three scenarios that will be analyzed in the system plan, Due: 10/31/2013, Status: On Schedule**

**M-062-40D, Submit a system plan describing the disposition of all tank waste managed by ORP, Due: 10/31/2014, Status: On Schedule**

**M-062-45-T01, Every six years, within six-months after last revision of the System Plan, negotiate tank waste retrieval sequencing, Due: 4/30/2015, Status: On Schedule**

### **Significant Past Accomplishments:**

DOE/ORP submitted the River Protection Project System Plan, Revision 6, with a joint Ecology signature to EPA on October 24, 2011.

### **Significant Planned Actions in the Next Six Months:**

None

### **Issues:**

None

**WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) PROJECT**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
M-062-01W	Submit Semi-Annual Project Compliance Report	07/28/2011	Completed – Letter 11-WTP-238 sent 7/27/11.
M-062-49	Submit a report to Ecology demonstrating that the WTP Project is designed to pretreat 100% of retrievable waste and vitrify 100% of separated high-level waste; with supplemental treatment WTP LAW can vitrify 100% of separated low-level waste stream.	10/31/2011	Complete. Letter 11-WTP-374 was signed sent with report on 10/27/11.
M-062-01X	Submit Semi-Annual TPA Project Compliance Report	01/31/2012	On Schedule.

The WTP Project currently employs about 3,561 Full-Time Equivalent (FTE) contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel, including 1,263 craft, 500 non-manual, and about 240 subcontractor personnel FTEs working at the WTP construction site (all facilities). As of September 2011, the project was 61 percent complete, design and engineering was 84 percent complete, procurement was 65 percent complete, construction was 57 percent complete, and startup and commissioning was 13 percent complete.

The overall WTP Project schedule variance in September was a negative \$10.2M; the cost variance was a negative \$2M. The negative cost variance was due to Construction Distributions, Construction Piping and Plant Equipment, and the schedule variances primarily were related to Plant Equipment.

Following is the status through the end of September for current project issues.

**Significant Past Accomplishments:**

- Awarded Resin Testing, Aerosol Testing, and fabrication of High Efficiency Mist Eliminator.
- Developed an updated detailed execution plan for the design, procurement, and installation of liner plates, jumper frames and equipment pads for the hot cell.
- Completed five concrete placements (for a total of 998 cubic yards) in October.
- Substantially completed mechanical systems design for the LAW facility.

**Significant Planned Actions in the Next Six Months:**

- Complete erection of 4<sup>th</sup>-tier structural steel in PT (77ft to 98ft elevation).
- Perform Large Scale Integrated Testing in (LSIT) 4ft and 8ft vessels to resolve mixing issues for PT.
- Set in-place two piping modules (PA07 upper, PA01 lower) in the PT black cells.

- Receive Plant Wash and Drains vessel for HLW (RLD-VSL-8).
- Complete installation of the Low-Activity Waste Facility and LAB autosampler systems.
- Complete construction of the Balance of Facilities (BOF) cooling tower.
- Complete construction of BOF switchgear building.

**Issues:**

No significant issues at this time.



## **PRETREATMENT (PT) FACILITY**

The Pretreatment (PT) Facility will separate radioactive tank waste into High Level Waste (HLW) and Low-Activity Waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Through September 2011, the PT Facility is 50 percent complete overall, with engineering design 78 percent complete, procurement 47 percent complete, and construction 39 percent complete.

### **Significant Past Accomplishments:**

Rebar and embed installation and fabrication of rebar wall curtains continues to support additional slab and wall placements at the 56ft to 98ft elevations. Construction completions for October include placement of six 5<sup>th</sup> lift (77ft to 98ft elevation) walls (total of 970 CY), and placement of a mud mat (80 CY) and the Plant Wash & Disposal system encasement (22 CY) for the Control Building.

On-going work includes installation of rebar for the Control Building basemat, fabrication of piping modules, installation of drain piping, service air piping, cable trays and supports, ductwork, conduit, wall liner plates, and sparge tubing in the hot cell, and structural steel at the 77ft elevation.

Engineering continues to implement changes from the technical issue resolutions into Piping and Instrumentation Diagrams (P&ID) and piping isometric drawings (issued 309). Engineering has issued re-committed P&IDs for the Radioactive Liquid Waste Disposal (RLD) and Steam Condensate Water (SCW) systems, and completed re-analysis of the Lag Storage and Feed Blending Process (HLP) vessel HLP-28.

Awards were made for the Resin Testing, Aerosol Testing, and fabrication of the High Efficiency Mist Eliminator (HEME). The report for TPA Milestone M-62-49 certifying WTP design meets the mission need has been delivered to Ecology on October 27, 2011, ahead of the milestone completion date of October 31, 2011.

An updated detailed execution plan for the design, procurement and installation of liner plates, jumper frames and equipment pads has been developed for the hot cell. Informational tests for the adequacy of Pulse Jet Mixers (PJM) with various firing sequences and pump-out configurations have been completed to understand the impacts of those changes. A number of

tests have yielded positive results for mixing. These tests will be further validated by NQA-1 tests in the 4ft, 8ft and 14ft vessels. Contracts for the procurement and testing of these platforms have been awarded. A dedicated Integrated Project Team (IPT) has been formed to support the resolution of the vessel mixing issue, and installation of vessels in the plant. The PJM design and control strategy document has been issued by BNI and sent out for the External Review Team (ERT) review.

PT critical paths primarily flows through the vessel HLP-22 installation. The next critical path flows through CXP vessel alterations, followed by the hot cell vertical pumps, integrated pump frames, and rigid electrical jumpers. The tertiary critical path flows through installation of HVAC PVV fans and blowers, followed by completion of the Filter Cave.

**Significant Planned Actions in the Next Six Months:**

- Start modification of the on-site process vessels to accommodate design changes from the seismic criteria changes and process changes.
- Complete fabrication of 3 black cell vessels.
- Set in-place 2 piping modules (PA07 upper, PA01 lower) in the black cells.
- Fabrication and delivery of initial hot cell equipment frames.
- Perform Large Scale Integrated Testing (LSIT) in 4ft and 8ft vessels for resolving mixing issues.
- Complete 5<sup>th</sup> lift wall placements, eight 98ft slab placements, two 6<sup>th</sup> lift wall placements, and placements of the Control Building basemat.
- Set Hot Cell Vertical door drive mechanism replacement gearbox and switch.
- Complete removal of the vessel CXP-001 from the black cell in accordance with the modified CXP system design.
- Complete Verification and Validation (V&V) of quantitative risk analysis for Hydrogen in Piping and Ancillary Vessels (HPAV).
- Complete nineteen mechanical systems re-committed design packages.
- Complete erection of 4<sup>th</sup> tier structural steel (77ft to 98ft elevation).
- Obtain Ecology approval of the permit packages to proceed with the alteration of the on-site vessels FRP -2A/B/C/D and UFP-62A/B/C in December 2011. These packages are scheduled to begin a public comment period in October 2011.
- Complete aerosol testing to determine entrainment coefficient for the PVV system

**Issues:**

- Vessel Critical Path: An issue with the seismic supports of vessel HLP-22 has prompted a redesign of PJM mounting hardware and a rework of the seismic analysis, which impacts critical path by an estimated 7-8 weeks. BNI is applying focused management attention to meet the schedule, and will be looking at ways to mitigate the slip in the construction portion of the schedule.

## **HIGH-LEVEL WASTE (HLW) FACILITY**

The High Level Waste (HLW) Facility will receive the separated high-level waste from the Pretreatment (PT) Facility. The concentrate is blended with glass formers and converted into molten glass in one of the two HLW melters and then poured into cylindrical stainless steel canisters. After cooling, the canisters are sealed and decontaminated prior to shipment to interim storage. The HLW Facility is 56 percent complete overall, with engineering design 86 percent complete, procurement 71 percent complete, and construction 36 percent complete.

### **Significant Past Accomplishments:**

The build-out of the Filter Cave remains critical path for HLW. The five C5V filter housings were set in September, with eight of the twenty dampers installed this month. Two HLW Melter Offgas (HOP) and two Pulse Jet Ventilation (PJV) housings were also set into the filter cave. The final two HOP housings will be the final units installed in mid-November. Fabrication and installation of the transition spool pieces began in October. Sixteen of the twenty C5V dampers have completed fabrication at the vendor in Switzerland and have either been received or are in transit. The last four C5V dampers have been shipped from Switzerland. With the completion of the C5V dampers, the vendor will continue with fabrication of the PJV System and followed by the HOP System remote-operated dampers. The schedule for equipment installations and deliveries is being maintained and will support a completion of the Filter Cave build-out in May 2012.

Five concrete placements (for a sum of 998 cubic yards) were completed in October. The subcontractor has completed the roof and the insulated siding on the HLW Annex several months ahead of schedule. Electrical and piping commodities are progressing throughout the -21ft, 0ft and 14ft elevation, including cooling water, cable trays and supports, and fire protection piping. Sub-Contractors are also continuing with applying special coatings, installing Heating, Ventilation, and Air Conditioning (HVAC), fire protection piping, and liner plate installations.

### **Significant Planned Actions in the Next Six Months:**

- Complete siding of HLW Annex.
- C5V housing and remote-operated damper installations.
- Receive Melter Feed Preparation vessel.
- Receive Plant Wash and Drains vessel (RLD-VSL-8).

### **Issues:**

No significant issues at this time.

### LOW-ACTIVITY WASTE (LAW) FACILITY

The Low-Activity Waste (LAW) Facility will vitrify LAW from the Pretreatment (PT) Facility. Waste will be mixed with glass formers, vitrified into glass at a design capacity of 30 metric tons per day, and placed in stainless steel containers that will be disposed on the Hanford Site in the Integrated Disposal Facility. The LAW Facility is 66 percent complete, with engineering design 88 percent complete, procurement 86 percent complete, and construction 65 percent complete.

#### **Significant Past Accomplishments:**

Mechanical systems design for the LAW facility is substantially complete. Electrical systems design continues in support of all equipment, controls, and lighting throughout the facility. For example, several electrical panel schedules were issued for the Low-Voltage Electrical (LVE) and Uninterruptible Power Electrical (UPE) systems. Engineering review of vendor calculations and interactions continues as a major emphasis during the ongoing procurement of Secondary Off-Gas/Vessel Vent Process (LVP) system components. For example, this month BNI Engineering issued several confirmed calculations including, *LAW Activated Carbon Bed Operation Conditions and Process Design Requirements*, *LAW Caustic Scrubber Process Operating Conditions and Design Requirements*, and *LAW Catalytic Oxidizer/Reducer Skid Inlet Operating Conditions and Design Requirements*, each for the LVP system, as well as *Overflow Drain Line Sizing* for the Primary Off-Gas Process (LOP) system and *Calculation for Evaluation of Off-Gas System in Case of Leakage in the LOP & LVP Vacuum Section*. Pipe support and piping isometric drawings were issued for the Radioactive Liquid Waste Disposal (RLD), Carbon Dioxide Gas (CDG), LAW Melter Feed Process (LFP), LAW Melter Process (LMP), LAW Primary Off-Gas Process (LOP), and Plant Service Air (PSA) systems.

Procurement activities for the LAW facility are currently focused on the LVP system components. The BNI/vendor interactions progressed well through the month. The first of these secondary off-gas treatment system components to be delivered will be the Carbon Bed Adsorber (CBA), which is currently expected by late November.

The primary areas of construction focus currently are facility partition wall installation and equipment installation for the Container Finishing Handling (LFH) system. Construction activities initiated this month included installation of the hoist for the Container Pour Handling (LPH) system and decontamination turntables for the LFH system. Installation was completed

on the bogie recovery equipment for the LPH system and on the inert fill hoppers and drop lines for the LFH system; other normal construction activities continued with installation of the fire alarm system, Medium-Voltage Electrical (MVE) equipment, Low-Voltage Electrical (LVE) equipment, hoist for the LPH system, cranes for the Melter Equipment Support Handling (LSH) system, and south finishing line mono-rail hoist and dual-rail hoist for the LFH system.

Integrated Control Network (ICN) development continued with software design and testing for the following systems:

- Melter Feed Process (LFP)
- Melter Process (LMP)

The LMP (LAW Melter Process) System Software Acceptance Test Report was issued.

**Significant Planned Actions in the Next Six Months:**

- Complete vendor fabrication of the carbon bed adsorber.
- Install melter power supplies.
- Complete installation of the ASX system.

**Issues:**

No major issues at this time.



### **ANALYTICAL LABORATORY**

The Analytical Laboratory (LAB) will support the Hanford Tank Waste Treatment and Immobilization (WTP) operations by analyzing feed, vitrified waste, and effluent streams. The LAB is 48 percent complete overall, with engineering design 78 percent complete, procurement 74 percent complete, and construction 68 percent complete.

#### **Significant Past Accomplishments:**

Efforts at the LAB are focused on the successful completion of the LAB Construction Substantially Complete Milestone in December 2012. Installation of partition walls is currently in progress. Installation of these walls defines individual work spaces and allows for easier visualization of the final product. Currently efforts are focused on the radiological laboratory area. BNI has refined the specifications for the fume hoods in these areas based on the processes that will be carried out by the technicians working in the LAB. In an effort to ensure personnel are appropriately qualified and trained once the LAB becomes operational, BNI has begun development of job descriptions for laboratory technicians.

In the last few months BNI has successfully resolved two daunting technical challenges in LAB. The first is the completion of the fireproofing slab in the C5 area, which prevented the installation of a new roof to meet fire safety concerns. The second is the remote maintenance of Radioactive Liquid Waste (RLD) valves in the C5 pit, which will reduce worker exposure during maintenance operations.

The LAB will typically receive samples from the other facilities via the autosampling system. Installation and testing of this system is currently in progress within LAB. Once the samples have arrived within LAB they will be analyzed for an array of different chemical and radiological properties. There is currently an evaluation in progress to determine if there are any gaps with regard to the required analyses and technology available for analysis.

#### **Significant Planned Actions in the Next Six Months:**

- Install Autosampler HEPA filter housings frames.
- Complete installation of Autosampler System.
- Install can crusher
- Set pumps in C5 pit
- Install Hot Cell import/export motors

#### **Issues:**

No major issues.

### **BALANCE OF FACILITIES (BOF)**

The Balance of Facilities (BOF) provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. The BOF is 47 percent complete overall, with engineering design 69 percent complete, procurement 47 percent complete, and construction 62 percent complete.

#### **Significant Past Accomplishments:**

Construction efforts for the BOF facilities are focused on supporting turnover of the first facility in 2012, and numerous other facilities in 2013. The framework and precedence for facility turnover will be established following completion of the Switchgear Building (B87). In addition, to preparing for the turnover of the first facility, BNI is developing alternate plans for a temporary control room until the LAW control room becomes operational.

The selection of an Emergency Turbine Generator (ETG) manufacturer was a major stepping stone in the transition from an emergency diesel generator to an ETG. The challenging work continues with ensuring that the BNI and the ETG vendor are in alignment with the required performance of the ETG.

BNI continues to address all safety related concerns as they arise, and is in the final stages of a response to a letter issued by the Defense Nuclear Facilities Safety Board (DNFSB) with regard to the anhydrous ammonia system.

#### **Significant Planned Actions in the Next Six Months:**

- Complete construction of cooling tower.
- Complete construction of BOF switchgear building.
- Install structural steel for anhydrous ammonia facility.
- Receive anhydrous ammonia system.

#### **Issues:**

No major issues.

Waste Treatment Plant Project - Percent Complete Status Through September 2011															
(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Commissioning Unallocated Dollars		
	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities															
Low-Activity Waste	959.3	637.3	66%	231.2	203.7	88%	238.0	204.0	86%	342.0	223.1	65%	148.1	6.4	4%
Analytical Lab	350.6	168.5	48%	55.3	43.1	78%	56.2	41.8	74%	104.0	71.0	68%	135.2	12.3	9%
Balance of Facilities	535.7	252.1	47%	90.1	61.8	69%	80.9	37.7	47%	228.6	142.5	62%	136.1	10.2	7%
High-Level Waste	1,493.6	831.6	56%	345.9	296.0	86%	455.7	322.2	71%	574.3	208.9	36%	117.8	4.5	4%
Pretreatment	2,509.5	1,249.5	50%	710.3	553.4	78%	715.8	337.1	47%	900.9	352.9	39%	182.6	6.1	3%
Shared Services	4,715.6	3,342.0	71%	1,026.5	900.4	88%	467.6	369.3	79%	1,421.9	1,054.2	74%	455.8	118.3	26%
Total WTP w/o UB	10,564.4	6,481.0	61%	2,459.2	2,058.5	84%	2,014.0	1,312.1	65%	3,571.7	2,052.7	57%	1,175.6	157.7	13%
Undistributed Budget	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	10,564.4	6,481.0	61%	2,459.2	2,058.5	84%	2,014.0	1,312.1	65%	3,571.7	2,052.7	57%	1,175.6	157.7	13%

Source: WTP Contract Performance Report - Format 1, Data for September 2011

Note: Starting with the June 2009 report, facility construction percent complete values decreased significantly, and a couple of Design/Engineering facility percent complete values went down as well. The decrease in values was tied to Phase 1 of BN's elimination of WBS 1.08, Plant Wide EPC; scope from WBS 1.08 was moved to facilities as appropriate or to WBS 1.90, Shared Services. This resulted in an increase in the facility construction budgets, which has correspondingly reduced the to-date percent complete values. In July 2010 the allocation of 1.90 to the facilities was removed to show true facility percent complete.

FINAL

Office of River Protection  
Consent Decree 08-5085-FVS

Project Summary Report

November 17, 2011

## Office of River Protection

Consent Decree 08-5085-FVS

Project Summary Report

November 17, 2011

8:30 a.m. – 11:00 a.m.

Page	Topic	Leads
1	Statistics / Status	Woody Russell / Dan McDonald / Jeff Lyon
5	SST Retrieval and Closure – D-00B-01, -02, -03, -04	Chris Kemp / Jeff Lyon
6	Tank Waste Retrieval Work Plan (TWRWP) Status – Consent Decree Appendix C	Chris Kemp / Jeff Lyon
7	WTP - Immobilization Plant Project – D-00A-06, D-00A-17, D-00A-01	Delmar Noyes / Dan McDonald
9	WTP Pretreatment (PT) Facility – D-00A-18, -19, -13, -14, -15, 16	Wahed Abdul / Dan McDonald
12	High-Level Waste (HLW) Facility – D-00A-20, -21, 02, 03	Gary Olsen / Dan McDonald
14	Low-Activity Waste (LAW) Facility – D-00A-07, -08, -09	Jeff Bruggeman / Dan McDonald
17	Analytical Laboratory (LAB) – D-00A-005	Jason Young / Dan McDonald
19	Balance of Facilities (BOF) – D-00A-12	Jason Young / Dan McDonald



Fiscal Year 2011 Consent Decree Milestone Status													
Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
D-00A-20	Complete Construction of Structural Steel to Elevation 14' in HLW Facility	12/31/10	01/31/10										
D-00C-01B	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	01/31/11	01/25/11										
D-00C-02D	Submit to Ecology and Oregon Monthly Summary Reports	02/28/11	2/25/11										
D-00C-02E	Submit to Ecology and Oregon Monthly Summary Reports	03/31/11	03/24/11										
D-00C-02F	Submit to Ecology and Oregon Monthly Summary Reports	04/30/11	04/29/11										
D-00C-02G	Submit to Ecology and Oregon Monthly Summary Reports	05/31/11	05/25/11										
D-00C-02H	Submit to Ecology and Oregon Monthly Summary Reports	06/30/11	06/30/11										
D-00C-02I	Submit to Ecology and Oregon Monthly Summary Reports	07/31/11	07/26/11										

### Fiscal Year 2011 Consent Decree Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
D-00C-02J	Submit to Ecology and Oregon Monthly Summary Reports	08/31/11	08/24/11										
D-00C-02K	Submit to Ecology and Oregon Monthly Summary Reports	09/31/11	09/27/11										
D-00C-01C	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	07/31/11	07/27/11										

### Fiscal Year 2012 Consent Decree Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
D-00C-02L	Submit to Ecology and Oregon Monthly Summary Reports	10/31/11	10/25/11										
D-00C-02M	Submit to Ecology and Oregon Monthly Summary Reports	11/30/11		X									
**D-00C-02N	Submit to Ecology and Oregon Monthly Summary Reports	12/31/11		X									
** Future Monthly Reports will be added as necessary to maintain a two-months ahead activity.													
D-00C-01D	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	01/31/12		X									
D-00C-01E	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	07/31/12		X									

## Reports

**D-00C-01 series, Submit to Ecology & State of Oregon Semi-Annual Report, Due: Semi-Annually – January 31<sup>st</sup> and July 31<sup>st</sup> of each year. Status: On Schedule**

**D-00C-02 series, Submit to Ecology & State of Oregon Monthly Summary Report Documenting Progress During Previous Month, Due: End of Each Month, Status: On Schedule**

**D-006-00-A1, Provide State of Oregon notice of meetings in D-006-00-A, etc. no less than 30 days before they are scheduled, Due: 9/25/2013, Status: On Schedule**

**D-006-00-A, Meet Approximately Every Three Years After Entry of Decree to review requirements of the Consent Decree, Due: 10/25/2013, Status: On Schedule**

## **SST Retrieval and Closure Program**

**D-00B-01, Complete Retrieval of Tank Wastes from 10 Remaining SSTs in WMA-C, Due:** 9/30/2014, Status: On Schedule

**D-00B-01A thru J, Submit Tank Retrieval Complete Certification, Due:** TBD

Pursuant to the requirement at IV(B)(5) of the Consent Decree (CD) DOE must submit to Ecology a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix "C", Part 1, of the CD. Tanks currently in retrieval status are C-107, C-108, C-109, C-110, C-104, and C-111.

**D-00B-02, Advise Ecology of the 9 SST's from which Waste Will Be Retrieved by 2022, Due:** 9/30/2014, Status: Complete. ORP and Ecology began meeting in December 2010 to discuss the selection of the next nine tanks to be retrieved and why ORP believes those nine tanks should be in A/AX Farms. The last meeting was held on August 24, 2011. At this meeting, Ecology provided ORP with the guidance that Ecology believes the requirements of Project B-2 of the Consent Decree have been met.

**D-00B-03, Initiate Startup Retrieval in At Least 5 of 9 SSTs in D-00B-02, Due:** 12/31/2017, Status: On Schedule

**D-00B-04, Complete Retrieval of Tank Wastes from the 9 SSTs in D-00B-02, Due:** 9/30/2022, Status: On Schedule

**D-00B-04A thru I, Submit Tank Retrieval Complete Certification, Due:** TBD

### **Significant Past Accomplishments:**

1. Continued retrieval activities in C-107 using the MARS retrieval system.
2. Initiated Hard Heel Removal activities by performing water rinses and water recirculation in C-108.
3. Continued design and procurement for C-109 Hard Heel Removal equipment.
4. Initiated Operation Acceptance Testing of the C-112 Modified Sluicing system.
5. Obtained Ecology approval of Modification Notice 2011-5 for TWRWP RPP-22393, on 10/11/11.

### **Significant Planned Activities in the Next Six Months:**

1. Complete the installation of the C-101 ventilation system and removal of legacy equipment.
2. Complete the installation of the C-102 ventilation system and removal of legacy equipment.
3. Continue with C-101 design development for installation of Modified Sluicing System.
4. Continue with C-102 design development for installation of Modified Sluicing System.
5. Complete C-107 bulk retrieval.



6. Complete hard heel retrieval of C-108.
7. Start up of C-112 Modified Sluicing Retrieval System.
8. Complete C-112 bulk retrieval.

**Issues:**

None.

**Tank Waste Retrieval Work Plan (TWRWP) Status**

<b>Tank</b>	<b>TWRWP</b>	<b>Expected Revisions</b>	<b>Retrieval Technology</b>	<b>Second Technology</b>	<b>Third Technology</b>
C-101	RPP-22520	Projected revision early fall	MRS (per 10/7/10 agreement, to be Modified Sluicing)	-	-
C-102	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-
C-103	RPP-21895	Retrieval Completed			
C-104	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-
C-105	RPP-22520	Projected revision early fall	MRS	-	-
C-106		Retrieval Completed			
C-107	RPP-22393	In Process	MARS-S	MARS-High Pressure	-
C-108	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-
C-109	RPP-21895	Following RPP-22393	Modified Sluicing	MS-ITV	-
C-110	RPP-33116	Following RPP-22393	Modified Sluicing	-	-
C-111	RPP-37739	Following RPP-22393	Modified Sluicing	-	-
C-112	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-

**Significant Accomplishments:**

- TWRWP Modification Notice 2011-3 for RPP-22393 was approved on 08/24/11.
- TWRWP Modification Notice 2011-2 for RPP-22393 was approved on 09/20/11.
- TWRWP Modification Notice 2011-5 for RPP-22393 was approved on 10/13/11.

**Issues:**

None.

**WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) PROJECT**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
D-00C-01D	Semi-Annual CD Report	01/31/2012	On schedule
D-00A-06	Complete Methods Validations	12/31/2017	On schedule
D-00A-17	Hot Start of Waste Treatment Plant	12/31/2019	On schedule
D-00A-01	Achieve Initial Plant Operations for WTP	12/31/2022	On schedule

The WTP Project currently employs about 3,561 Full-Time Equivalent (FTE) contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel, including 1,263 craft, 500 non-manual, and about 240 subcontractor personnel FTEs working at the WTP construction site (all facilities). As of September 2011, the project was 61 percent complete, design and engineering was 84 percent complete, procurement was 65 percent complete, construction was 57 percent complete, and startup and commissioning was 13 percent complete.

The overall WTP Project schedule variance in September was a negative \$10.2M; the cost variance was a negative \$2M. The negative cost variance was due to Construction Distributions, Construction Piping and Plant Equipment, and the schedule variances primarily were related to Plant Equipment.

Following is the status through the end of September for current project issues.

**Significant Past Accomplishments:**

- Awarded Resin Testing, Aerosol Testing, and fabrication of High Efficiency Mist Eliminator.
- Developed an updated detailed execution plan for the design, procurement, and installation of liner plates, jumper frames and equipment pads for the hot cell.
- Completed five concrete placements (for a total of 998 cubic yards) in October.
- Substantially completed mechanical systems design for the LAW facility.

**Significant Planned Actions in the Next Six Months:**

- Complete erection of 4<sup>th</sup>-tier structural steel in PT(77ft to 98ft elevation).
- Perform Large Scale Integrated Testing in 4 ft and 8 ft vessels to resolve mixing issues for PT.
- Set in-place two piping modules (PA07 upper, PA01 lower) in the PT black cells.
- Receive Plant Wash and Drains vessel for HLW (RLD-VSL-8).
- Complete installation of the Low-Activity Waste Facility and LAB autosampler systems.
- Complete construction of the Balance of Facilities (BOF) cooling tower.
- Complete construction of BOF switchgear building.

**Issues:**

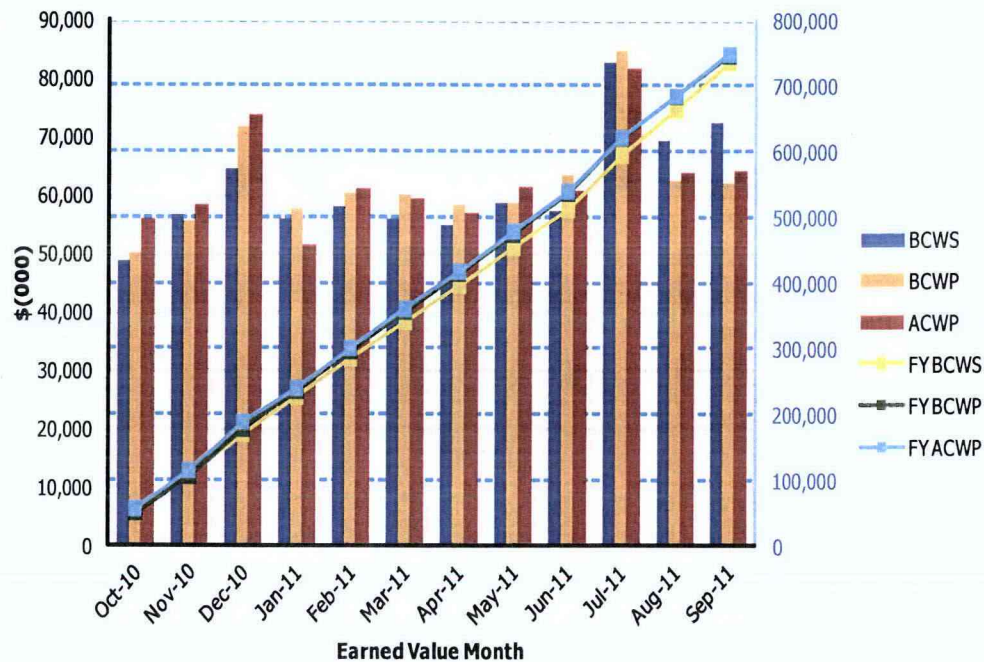
No significant issues at this time.

Data Set: FY 2011 Earned Value Data

Data as of: September 2011

**River Protection**  
**01-D-416 - Waste Treatment Plant (WTP) Project**

Monthly EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$48,550	\$49,962	\$55,880	1.03	0.89	\$48,550	\$49,962	\$55,880	1.03	0.89
Nov 2010	\$56,608	\$55,427	\$58,449	0.98	0.95	\$105,158	\$105,389	\$114,329	1.00	0.92
Dec 2010	\$64,533	\$71,852	\$73,610	1.11	0.98	\$169,691	\$177,241	\$187,939	1.04	0.94
Jan 2011	\$55,988	\$57,756	\$51,327	1.03	1.13	\$225,679	\$234,997	\$239,266	1.04	0.98
Feb 2011	\$57,941	\$60,462	\$61,199	1.04	0.99	\$283,620	\$295,459	\$300,465	1.04	0.98
Mar 2011	\$56,009	\$60,032	\$59,335	1.07	1.01	\$339,629	\$355,491	\$359,800	1.05	0.99
Apr 2011	\$54,890	\$58,438	\$56,937	1.06	1.03	\$394,519	\$413,929	\$416,737	1.05	0.99
May 2011	\$58,530	\$58,722	\$61,263	1.00	0.96	\$453,049	\$472,651	\$478,000	1.04	0.99
Jun 2011	\$57,334	\$63,340	\$60,603	1.10	1.05	\$510,383	\$535,991	\$538,603	1.05	1.00
Jul 2011	\$82,643	\$84,827	\$81,479	1.03	1.04	\$593,026	\$620,818	\$620,082	1.05	1.00
Aug 2011	\$69,443	\$62,518	\$63,892	0.90	0.98	\$662,469	\$683,336	\$683,974	1.03	1.00
Sep 2011	\$72,253	\$62,071	\$64,022	0.86	0.97	\$734,722	\$745,407	\$747,996	1.01	1.00
PTD	\$6,463,748	\$6,480,955	\$6,506,025	1.00	1.00					

**PRETREATMENT (PT) FACILITY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
D-00A-19	Complete Elevation 98' Concrete Floor Slab in PT Facility	12/31/2014	On Schedule
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels	12/31/2015	On Schedule
D-00A-14	PT Facility Construction Substantially Complete	12/31/2017	On Schedule
D-00A-15	Start PT Facility Cold Commissioning	12/31/2018	On Schedule
D-00A-16	PT Facility Hot Commissioning Complete	12/31/2019	On Schedule

The Pretreatment (PT) Facility will separate radioactive tank waste into High Level Waste (HLW) and Low-Activity Waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Through September 2011, the PT Facility is 50 percent complete overall, with engineering design 78 percent complete, procurement 47 percent complete, and construction 39 percent complete.

**Significant Past Accomplishments:**

Rebar and embed installation and fabrication of rebar wall curtains continues to support additional slab and wall placements at the 56ft to 98ft elevations. Construction completions for October include placement of six 5<sup>th</sup> lift (77ft to 98ft elevation) walls (total of 970 CY), and placement of a mud mat (80 CY) and the Plant Wash & Disposal system encasement (22 CY) for the Control Building.

On-going work includes installation of rebar for the Control Building basemat, fabrication of piping modules, installation of drain piping, service air piping, cable trays and supports, ductwork, conduit, wall liner plates, and sparge tubing in the hot cell, and structural steel at the 77ft elevation.

Engineering continues to implement changes from the technical issue resolutions into Piping and Instrumentation Diagrams (P&ID) and piping isometric drawings (issued 309). Engineering has issued re-committed P&IDs for the Radioactive Liquid Waste Disposal (RLD) and Steam Condensate Water (SCW) systems, and completed re-analysis of the Lag Storage and Feed Blending Process (HLP) vessel HLP-28.

Awards were made for the Resin Testing, Aerosol Testing, and fabrication of the High Efficiency Mist Eliminator (HEME). The report for TPA Milestone M-62-49 certifying WTP design meets the mission need has been delivered to Ecology on October 27, 2011, ahead of the milestone completion date of October 31, 2011.

An updated detailed execution plan for the design, procurement and installation of liner plates, jumper frames and equipment pads has been developed for the hot cell. Informational tests for the adequacy of Pulse Jet Mixers (PJM) with various firing sequences and pump-out configurations have been completed to understand the impacts of those changes. A number of tests have yielded positive results for mixing. These tests will be further validated by NQA-1 tests in the 4ft, 8ft and 14ft vessels. Contracts for the procurement and testing of these platforms have been awarded. A dedicated Integrated Project Team (IPT) has been formed to support the

resolution of the vessel mixing issue, and installation of vessels in the plant. The PJM design and control strategy document has been issued by BNI and sent out for the External Review Team (ERT) review.

PT critical paths primarily flows through the vessel HLP-22 installation. The next critical path flows through CXP vessel alterations, followed by the hot cell vertical pumps, integrated pump frames, and rigid electrical jumpers. The tertiary critical path flows through installation of HVAC PVV fans and blowers, followed by completion of the Filter Cave.

**Significant Planned Actions in the Next Six Months:**

- Start modification of the on-site process vessels to accommodate design changes from the seismic criteria changes and process changes.
- Complete fabrication of 3 black cell vessels.
- Set in-place 2 piping modules (PA07 upper, PA01 lower) in the black cells.
- Fabrication and delivery of initial hot cell equipment frames.
- Perform Large Scale Integrated Testing (LSIT) in 4ft and 8ft vessels for resolving mixing issues.
- Complete 5<sup>th</sup> lift wall placements, eight 98ft slab placements, two 6<sup>th</sup> lift wall placements, and placements of the Control Building basemat.
- Set Hot Cell Vertical door drive mechanism replacement gearbox and switch.
- Complete removal of the vessel CXP-001 from the black cell in accordance with the modified CXP system design.
- Complete Verification and Validation (V&V) of quantitative risk analysis for Hydrogen in Piping and Ancillary Vessels (HPAV).
- Complete nineteen mechanical systems re-committed design packages.
- Complete erection of 4<sup>th</sup> tier structural steel (77ft to 98ft elevation).
- Obtain Ecology approval of the permit packages to proceed with the alteration of the on-site vessels FRP -2A/B/C/D and UFP-62A/B/C in December 2011. These packages are scheduled to begin a public comment period in October 2011.
- Complete aerosol testing to determine entrainment coefficient for the PVV system

**Issues:**

- Vessel Critical Path: An issue with the seismic supports of vessel HLP-22 has prompted a redesign of PJM mounting hardware and a rework of the seismic analysis, which impacts critical path by an estimated 7-8 weeks. BNI is applying focused management attention to meet the schedule, and will be looking at ways to mitigate the slip in the construction portion of the schedule.

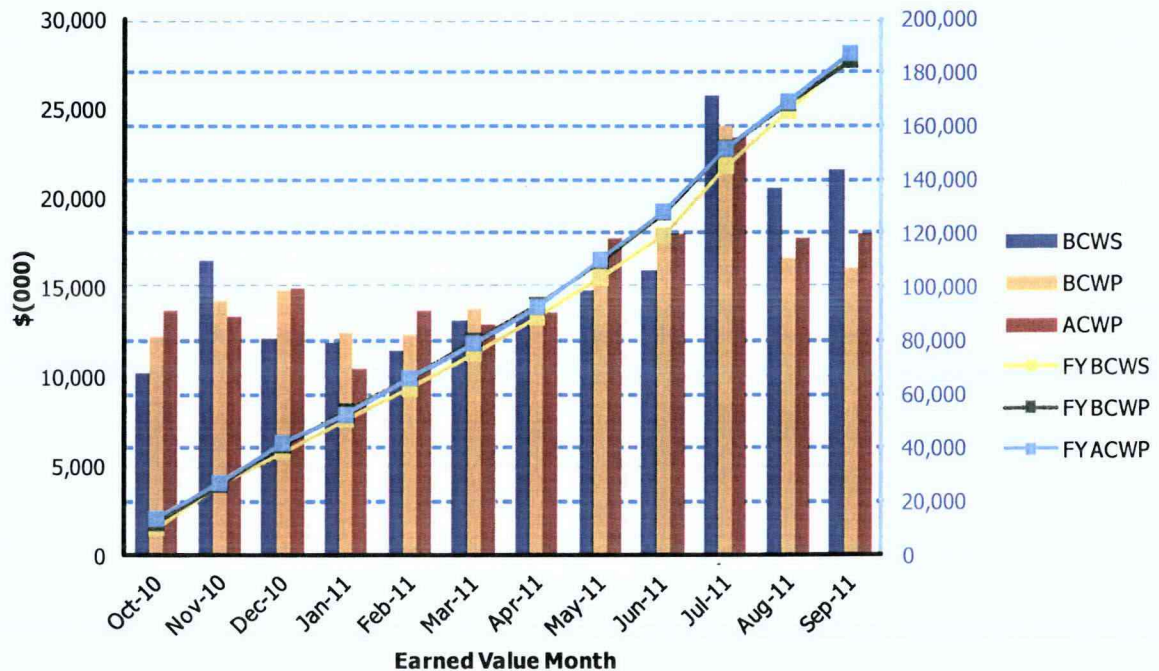


Data Set: FY 2011 Earned Value Data

Data as of: September 2011

**River Protection**  
**01-D-16E - Pretreatment Facility**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$10,196	\$12,179	\$13,730	1.19	0.89	\$10,196	\$12,179	\$13,730	1.19	0.89
Nov 2010	\$16,462	\$14,257	\$13,360	0.87	1.07	\$26,658	\$26,436	\$27,090	0.99	0.98
Dec 2010	\$12,060	\$14,788	\$14,869	1.23	0.99	\$38,718	\$41,224	\$41,959	1.06	0.98
Jan 2011	\$11,902	\$12,449	\$10,403	1.05	1.20	\$50,620	\$53,673	\$52,362	1.06	1.03
Feb 2011	\$11,428	\$12,373	\$13,692	1.08	0.90	\$62,048	\$66,046	\$66,054	1.06	1.00
Mar 2011	\$13,145	\$13,809	\$12,923	1.05	1.07	\$75,193	\$79,855	\$78,977	1.06	1.01
Apr 2011	\$13,444	\$13,497	\$13,533	1.00	1.00	\$88,637	\$93,352	\$92,510	1.05	1.01
May 2011	\$14,789	\$16,506	\$17,668	1.12	0.93	\$103,426	\$109,858	\$110,178	1.06	1.00
Jun 2011	\$15,909	\$17,928	\$17,968	1.13	1.00	\$119,335	\$127,786	\$128,146	1.07	1.00
Jul 2011	\$25,653	\$23,993	\$23,391	0.94	1.03	\$144,988	\$151,779	\$151,537	1.05	1.00
Aug 2011	\$20,509	\$16,619	\$17,678	0.81	0.94	\$165,497	\$168,398	\$169,215	1.02	1.00
Sep 2011	\$21,485	\$16,059	\$17,920	0.75	0.90	\$186,982	\$184,457	\$187,135	0.99	0.99
PTD	\$1,243,173	\$1,249,496	\$1,220,615	1.01	1.02					

**HIGH-LEVEL WASTE (HLW) FACILITY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
D-00A-21	Complete Construction of Structural Steel to 37' in HLW Facility	12/31/2012	On Schedule
D-00A-02	HLW Facility Construction Substantially Complete	12/31/2016	On Schedule
D-00A-03	Start HLW Facility Cold Commissioning	6/30/2018	On Schedule
D-00A-04	HLW Facility Hot Commissioning Complete	12/31/2019	On Schedule

The High Level Waste (HLW) Facility will receive the separated high-level waste from the Pretreatment (PT) Facility. The concentrate is blended with glass formers and converted into molten glass in one of the two HLW melters and then poured into cylindrical stainless steel canisters. After cooling, the canisters are sealed and decontaminated prior to shipment to interim storage. The HLW Facility is 56 percent complete overall, with engineering design 86 percent complete, procurement 71 percent complete, and construction 36 percent complete.

**Significant Past Accomplishments:**

The build-out of the Filter Cave remains critical path for HLW. The five C5V filter housings were set in September, with eight of the twenty dampers installed this month. Two HLW Melter Offgas (HOP) and two Pulse Jet Ventilation (PJV) housings were also set into the filter cave. The final two HOP housings will be the final units installed in mid-November. Fabrication and installation of the transition spool pieces began in October. Sixteen of the twenty C5V dampers have completed fabrication at the vendor in Switzerland and have either been received or are in transit. The last four C5V dampers have been shipped from Switzerland. With the completion of the C5V dampers, the vendor will continue with fabrication of the PJV System and followed by the HOP System remote-operated dampers. The schedule for equipment installations and deliveries is being maintained and will support a completion of the Filter Cave build-out in May 2012.

Five concrete placements (for a sum of 998 cubic yards) were completed in October. The subcontractor has completed the roof and the insulated siding on the HLW Annex several months ahead of schedule. Electrical and piping commodities are progressing throughout the -21 ft, 0 ft and 14 ft elevation, including cooling water, cable trays and supports, and fire protection piping. Sub-Contractors are also continuing with applying special coatings, installing Heating, Ventilation, and Air Conditioning (HVAC), fire protection piping, and liner plate installations.

**Significant Planned Actions in the Next Six Months:**

- Complete siding of HLW Annex.
- C5V housing and remote-operated damper installations.
- Receive Melter Feed Preparation vessel.
- Receive Plant Wash and Drains vessel (RLD-VSL-8).

**Issues:**

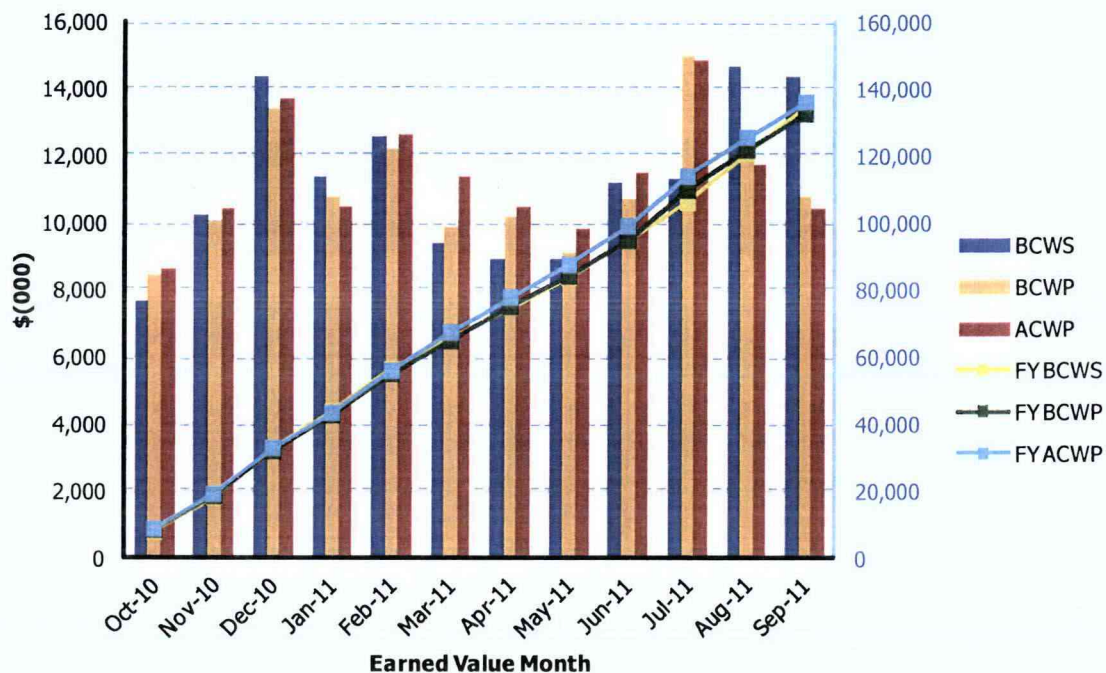
No significant issues at this time.

Data Set: FY 2011 Earned Value Data

Data as of: September 2011

**River Protection**  
**01-D-16D - High-Level Waste Facility**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$7,653	\$8,413	\$8,615	1.10	0.98	\$7,653	\$8,413	\$8,615	1.10	0.98
Nov 2010	\$10,239	\$10,032	\$10,434	0.98	0.96	\$17,892	\$18,445	\$19,049	1.03	0.97
Dec 2010	\$14,364	\$13,384	\$13,697	0.93	0.98	\$32,256	\$31,829	\$32,746	0.99	0.97
Jan 2011	\$11,360	\$10,767	\$10,461	0.95	1.03	\$43,616	\$42,596	\$43,207	0.98	0.99
Feb 2011	\$12,550	\$12,224	\$12,651	0.97	0.97	\$56,166	\$54,820	\$55,858	0.98	0.98
Mar 2011	\$9,376	\$9,860	\$11,369	1.05	0.87	\$65,542	\$64,680	\$67,227	0.99	0.96
Apr 2011	\$8,930	\$10,154	\$10,445	1.14	0.97	\$74,472	\$74,834	\$77,672	1.00	0.96
May 2011	\$8,919	\$9,075	\$9,806	1.02	0.93	\$83,391	\$83,909	\$87,478	1.01	0.96
Jun 2011	\$11,189	\$10,734	\$11,504	0.96	0.93	\$94,580	\$94,643	\$98,982	1.00	0.96
Jul 2011	\$11,311	\$14,941	\$14,846	1.32	1.01	\$105,891	\$109,584	\$113,828	1.03	0.96
Aug 2011	\$14,636	\$12,025	\$11,708	0.82	1.03	\$120,527	\$121,609	\$125,536	1.01	0.97
Sep 2011	\$14,339	\$10,792	\$10,394	0.75	1.04	\$134,866	\$132,401	\$135,930	0.98	0.97
PTD	\$829,494	\$831,625	\$825,057	1.00	1.01					

**LOW-ACTIVITY WASTE (LAW) FACILITY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2014	On schedule
D-00A-08	Start LAW Facility Cold Commissioning	12/31/2018	On schedule
D-00A-09	LAW Facility Hot Commissioning Complete	12/31/2019	On schedule

The Low-Activity Waste (LAW) Facility will vitrify LAW from the Pretreatment (PT) Facility. Waste will be mixed with glass formers, vitrified into glass at a design capacity of 30 metric tons per day, and placed in stainless steel containers that will be disposed on the Hanford Site in the Integrated Disposal Facility. The LAW Facility is 66 percent complete, with engineering design 88 percent complete, procurement 86 percent complete, and construction 65 percent complete.

**Significant Past Accomplishments:**

Mechanical systems design for the LAW facility is substantially complete. Electrical systems design continues in support of all equipment, controls, and lighting throughout the facility. For example, several electrical panel schedules were issued for the Low-Voltage Electrical (LVE) and Uninterruptible Power Electrical (UPE) systems. Engineering review of vendor calculations and interactions continues as a major emphasis during the ongoing procurement of Secondary Off-Gas/Vessel Vent Process (LVP) system components. For example, this month BNI Engineering issued several confirmed calculations including, *LAW Activated Carbon Bed Operation Conditions and Process Design Requirements*, *LAW Caustic Scrubber Process Operating Conditions and Design Requirements*, and *LAW Catalytic Oxidizer/Reducer Skid Inlet Operating Conditions and Design Requirements*, each for the LVP system, as well as *Overflow Drain Line Sizing* for the Primary Off-Gas Process (LOP) system and *Calculation for Evaluation of Off-Gas System in Case of Leakage in the LOP & LVP Vacuum Section*. Pipe support and piping isometric drawings were issued for the Radioactive Liquid Waste Disposal (RLD), Carbon Dioxide Gas (CDG), LAW Melter Feed Process (LFP), LAW Melter Process (LMP), LAW Primary Off-Gas Process (LOP), and Plant Service Air (PSA) systems.

Procurement activities for the LAW facility are currently focused on the LVP system components. The BNI/vendor interactions progressed well through the month. The first of these secondary off-gas treatment system components to be delivered will be the Carbon Bed Adsorber (CBA), which is currently expected by late November.

The primary areas of construction focus currently are facility partition wall installation and equipment installation for the Container Finishing Handling (LFH) system. Construction activities initiated this month included installation of the hoist for the Container Pour Handling (LPH) system and decontamination turntables for the LFH system. Installation was completed on the bogie recovery equipment for the LPH system and on the inert fill hoppers and drop lines for the LFH system; other normal construction activities continued with installation of the fire alarm system, Medium-Voltage Electrical (MVE) equipment, Low-Voltage Electrical (LVE) equipment, hoist for the LPH system, cranes for the Melter Equipment Support Handling (LSH) system, and south finishing line mono-rail hoist and dual-rail hoist for the LFH system.

Integrated Control Network (ICN) development continued with software design and testing for the following systems:

- Melter Feed Process (LFP)
- Melter Process (LMP)

The LMP (LAW Melter Process) System Software Acceptance Test Report was issued.

**Significant Planned Actions in the Next Six Months:**

- Complete vendor fabrication of the carbon bed adsorber.
- Install melter power supplies.
- Complete installation of the ASX system.

**Issues:**

No major issues at this time.

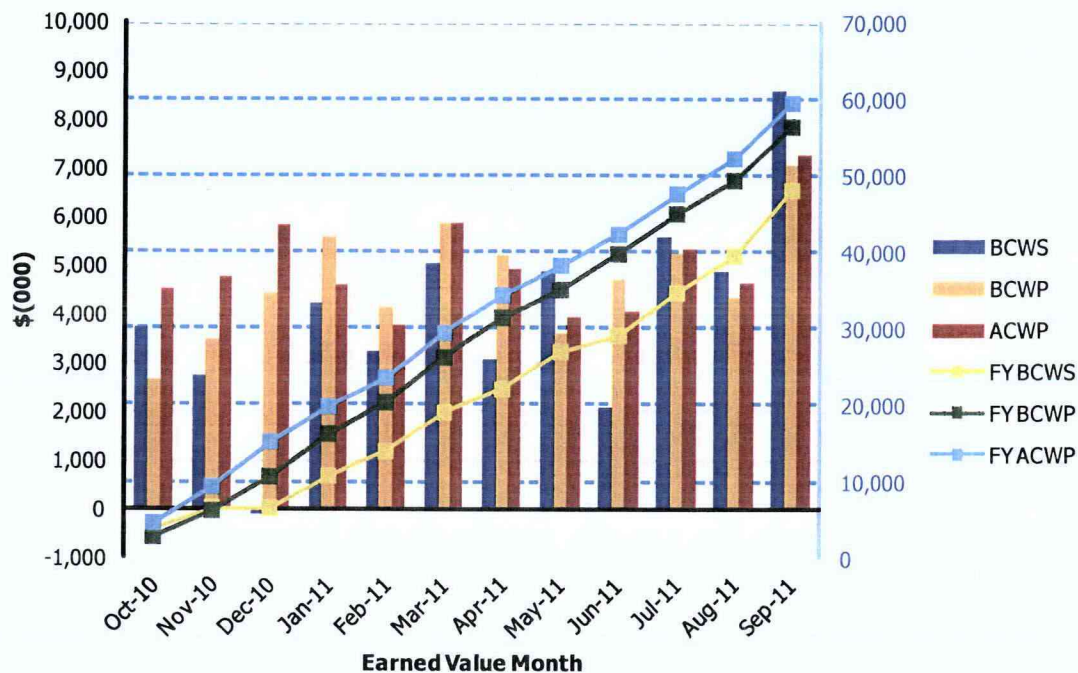


Data Set: FY 2011 Earned Value Data

Data as of: September 2011

**River Protection**  
**01-D-16A - Low-Activity Waste Facility**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$3,743	\$2,654	\$4,511	0.71	0.59	\$3,743	\$2,654	\$4,511	0.71	0.59
Nov 2010	\$2,732	\$3,462	\$4,752	1.27	0.73	\$6,475	\$6,116	\$9,263	0.94	0.66
Dec 2010	(\$84)	\$4,424	\$5,823	-52.67	0.76	\$6,391	\$10,540	\$15,086	1.65	0.70
Jan 2011	\$4,232	\$5,597	\$4,606	1.32	1.22	\$10,623	\$16,137	\$19,692	1.52	0.82
Feb 2011	\$3,222	\$4,153	\$3,778	1.29	1.10	\$13,845	\$20,290	\$23,470	1.47	0.86
Mar 2011	\$5,054	\$5,862	\$5,857	1.16	1.00	\$18,899	\$26,152	\$29,327	1.38	0.89
Apr 2011	\$3,062	\$5,210	\$4,930	1.70	1.06	\$21,961	\$31,362	\$34,257	1.43	0.92
May 2011	\$4,895	\$3,600	\$3,919	0.74	0.92	\$26,856	\$34,962	\$38,176	1.30	0.92
Jun 2011	\$2,089	\$4,713	\$4,057	2.26	1.16	\$28,945	\$39,675	\$42,233	1.37	0.94
Jul 2011	\$5,595	\$5,237	\$5,315	0.94	0.99	\$34,540	\$44,912	\$47,548	1.30	0.94
Aug 2011	\$4,870	\$4,353	\$4,615	0.89	0.94	\$39,410	\$49,265	\$52,163	1.25	0.94
Sep 2011	\$8,570	\$7,059	\$7,277	0.82	0.97	\$47,980	\$56,324	\$59,440	1.17	0.95
PTD	\$636,584	\$637,262	\$682,535	1.00	0.93					

**ANALYTICAL LABORATORY**

Number	Title	Due Date	Status
D-00A-05	LAB Construction Substantially Complete	12/31/2012	On Schedule

The Analytical Laboratory (LAB) will support the Hanford Tank Waste Treatment and Immobilization (WTP) operations by analyzing feed, vitrified waste, and effluent streams. The LAB is 48 percent complete overall, with engineering design 78 percent complete, procurement 74 percent complete, and construction 68 percent complete.

**Significant Past Accomplishments:**

Efforts at the LAB are focused on the successful completion of the LAB Construction Substantially Complete Milestone in December 2012. Installation of partition walls is currently in progress. Installation of these walls defines individual work spaces and allows for easier visualization of the final product. Currently efforts are focused on the radiological laboratory area. BNI has refined the specifications for the fume hoods in these areas based on the processes that will be carried out by the technicians working in the LAB. In an effort to ensure personnel are appropriately qualified and trained once the LAB becomes operational, BNI has begun development of job descriptions for laboratory technicians.

In the last few months BNI has successfully resolved two daunting technical challenges in LAB. The first is the completion of the fireproofing slab in the C5 area, which prevented the installation of a new roof to meet fire safety concerns. The second is the remote maintenance of Radioactive Liquid Waste (RLD) valves in the C5 pit, which will reduce worker exposure during maintenance operations.

The LAB will typically receive samples from the other facilities via the autosampling system. Installation and testing of this system is currently in progress within LAB. Once the samples have arrived within LAB they will be analyzed for an array of different chemical and radiological properties. There is currently an evaluation in progress to determine if there are any gaps with regard to the required analyses and technology available for analysis.

**Significant Planned Actions in the Next Six Months:**

- Install Autosampler HEPA filter housings frames.
- Complete installation of Autosampler System.
- Install can crusher
- Set pumps in C5 pit
- Install Hot Cell import/export motors

**Issues:**

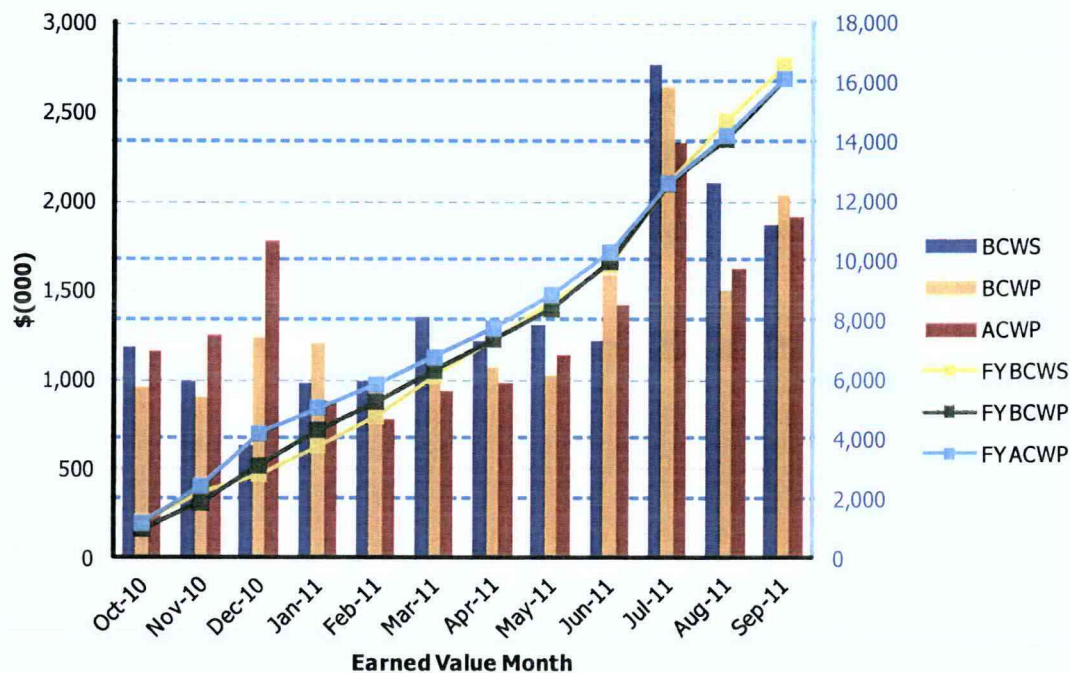
No major issues.

Data Set: FY 2011 Earned Value Data

Data as of: September 2011

**River Protection**  
**01-D-16B - Analytical Laboratory**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$1,180	\$954	\$1,152	0.81	0.83	\$1,180	\$954	\$1,152	0.81	0.83
Nov 2010	\$984	\$893	\$1,245	0.91	0.72	\$2,164	\$1,847	\$2,397	0.85	0.77
Dec 2010	\$621	\$1,236	\$1,768	1.99	0.70	\$2,785	\$3,083	\$4,165	1.11	0.74
Jan 2011	\$971	\$1,198	\$869	1.23	1.38	\$3,756	\$4,281	\$5,034	1.14	0.85
Feb 2011	\$982	\$949	\$770	0.97	1.23	\$4,738	\$5,230	\$5,804	1.10	0.90
Mar 2011	\$1,350	\$1,039	\$924	0.77	1.12	\$6,088	\$6,269	\$6,728	1.03	0.93
Apr 2011	\$1,210	\$1,059	\$974	0.88	1.09	\$7,298	\$7,328	\$7,702	1.00	0.95
May 2011	\$1,299	\$1,018	\$1,133	0.78	0.90	\$8,597	\$8,346	\$8,835	0.97	0.94
Jun 2011	\$1,213	\$1,579	\$1,413	1.30	1.12	\$9,810	\$9,925	\$10,248	1.01	0.97
Jul 2011	\$2,755	\$2,634	\$2,325	0.96	1.13	\$12,565	\$12,559	\$12,573	1.00	1.00
Aug 2011	\$2,093	\$1,489	\$1,611	0.71	0.92	\$14,658	\$14,048	\$14,184	0.96	0.99
Sep 2011	\$1,867	\$2,035	\$1,907	1.09	1.07	\$16,525	\$16,083	\$16,091	0.97	1.00
PTD	\$169,802	\$168,469	\$180,769	0.99	0.93					

**BALANCE OF FACILITIES (BOF)**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
D-00A-12	Steam Plant Construction Complete	12/31/2012	On Schedule

The Balance of Facilities (BOF) provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. The BOF is 47 percent complete overall, with engineering design 69 percent complete, procurement 47 percent complete, and construction 62 percent complete.

**Significant Past Accomplishments:**

Construction efforts for the BOF facilities are focused on supporting turnover of the first facility in 2012, and numerous other facilities in 2013. The framework and precedence for facility turnover will be established following completion of the Switchgear Building (B87). In addition, to preparing for the turnover of the first facility, BNI is developing alternate plans for a temporary control room until the LAW control room becomes operational.

The selection of an Emergency Turbine Generator (ETG) manufacturer was a major stepping stone in the transition from an emergency diesel generator to an ETG. The challenging work continues with ensuring that the BNI and the ETG vendor are in alignment with the required performance of the ETG.

BNI continues to address all safety related concerns as they arise, and is in the final stages of a response to a letter issued by the Defense Nuclear Facilities Safety Board (DNFSB) with regard to the anhydrous ammonia system.

**Significant Planned Actions in the Next Six Months:**

- Complete construction of cooling tower.
- Complete construction of BOF switchgear building.
- Install structural steel for anhydrous ammonia facility.
- Receive anhydrous ammonia system.

**Issues:**

No major issues.

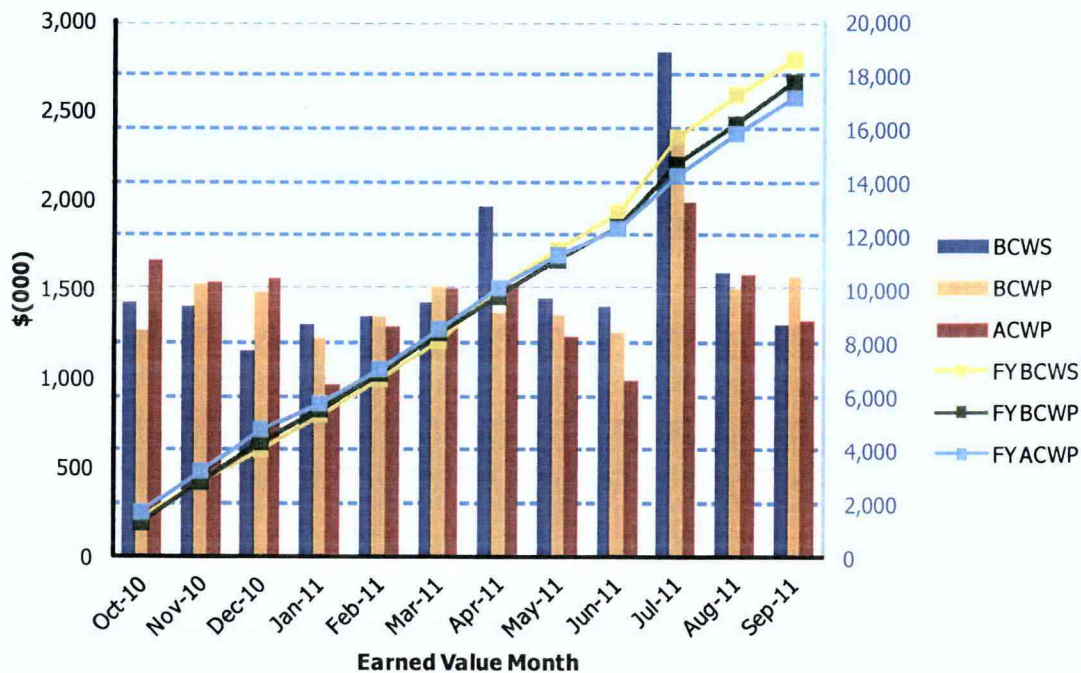


Data Set: FY 2011 Earned Value Data

Data as of: September 2011

**River Protection**  
**01-D-16C - Balance of Facilities**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$1,428	\$1,272	\$1,660	0.89	0.77	\$1,428	\$1,272	\$1,660	0.89	0.77
Nov 2010	\$1,398	\$1,520	\$1,539	1.09	0.99	\$2,826	\$2,792	\$3,199	0.99	0.87
Dec 2010	\$1,150	\$1,475	\$1,558	1.28	0.95	\$3,976	\$4,267	\$4,757	1.07	0.90
Jan 2011	\$1,302	\$1,224	\$960	0.94	1.28	\$5,278	\$5,491	\$5,717	1.04	0.96
Feb 2011	\$1,347	\$1,346	\$1,288	1.00	1.05	\$6,625	\$6,837	\$7,005	1.03	0.98
Mar 2011	\$1,429	\$1,518	\$1,505	1.06	1.01	\$8,054	\$8,355	\$8,510	1.04	0.98
Apr 2011	\$1,962	\$1,363	\$1,524	0.69	0.89	\$10,016	\$9,718	\$10,034	0.97	0.97
May 2011	\$1,442	\$1,352	\$1,237	0.94	1.09	\$11,458	\$11,070	\$11,271	0.97	0.98
Jun 2011	\$1,400	\$1,253	\$980	0.90	1.28	\$12,858	\$12,323	\$12,251	0.96	1.01
Jul 2011	\$2,824	\$2,347	\$1,984	0.83	1.18	\$15,682	\$14,670	\$14,235	0.94	1.03
Aug 2011	\$1,594	\$1,501	\$1,586	0.94	0.95	\$17,276	\$16,171	\$15,821	0.94	1.02
Sep 2011	\$1,300	\$1,575	\$1,321	1.21	1.19	\$18,576	\$17,746	\$17,142	0.96	1.04
PTD	\$253,843	\$252,112	\$249,056	0.99	1.01					



### Waste Treatment Plant Project - Percent Complete Status

Through September 2011

(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Commissioning Unallocated Dollars		
	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities															
Low-Activity Waste	959.3	637.3	66%	231.2	203.7	88%	238.0	204.0	86%	342.0	223.1	65%	148.1	6.4	4%
Analytical Lab	350.6	168.5	48%	55.3	43.1	78%	56.2	41.8	74%	104.0	71.0	68%	135.2	12.3	9%
Balance of Facilities	535.7	252.1	47%	90.1	61.8	69%	80.9	37.7	47%	228.6	142.5	62%	136.1	10.2	7%
High-Level Waste	1,493.6	831.6	56%	345.9	296.0	86%	455.7	322.2	71%	574.3	208.9	36%	117.8	4.5	4%
Pretreatment	2,509.5	1,249.5	50%	710.3	553.4	78%	715.8	337.1	47%	900.9	352.9	39%	182.6	6.1	3%
Shared Services	4,715.6	3,342.0	71%	1,026.5	900.4	88%	467.6	369.3	79%	1,421.9	1,054.2	74%	455.8	118.3	26%
Total WTP w/o UB	10,564.4	6,481.0	61%	2,459.2	2,058.5	84%	2,014.0	1,312.1	65%	3,571.7	2,052.7	57%	1,175.6	157.7	13%
Undistributed Budget	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	10,564.4	6,481.0	61%	2,459.2	2,058.5	84%	2,014.0	1,312.1	65%	3,571.7	2,052.7	57%	1,175.6	157.7	13%

Source: WTP Contract Performance Report - Format 1.1, Data for September 2011

Note: Starting with the June 2009 report, facility construction percent complete values decreased significantly, and a couple of Design/Engineering facility percent complete values went down as well. The decrease in values was tied to Phase 1 of BN's elimination of WBS 1.08, Plant Wide EPCC; scope from WBS 1.08 was moved to facilities as appropriate or to WBS 1.90, Shared Services. This resulted in an increase in the facility construction budgets, which has correspondingly reduced the to-date percent complete values. In July 2010 the allocation of 1.90 to the facilities was removed to show true facility percent complete.

## **ORP/Ecology TPA and CD Agreements, Issues, Actions, and Recent TPA Administrative Record Items Updates for November 2011**

### **Agreements:**

1. November Dry-Run for the Quarterly meeting will be held on Tuesday, November 15<sup>th</sup>, 2011. **Complete.**
2. Resolution of M-045-101 is extended to December 5, 2011. **Ongoing.**
3. M-045-80 (Items 2,3, and 4) – Ecology and ORP agree to extend submittal and response to Ecology comments to December 5, 2011. **Ongoing.**
4. M-045-81 – Ecology and ORP agree to extend submittal and response to Ecology to December 5, 2011 contingent on disposition of RCRs. **Ongoing.**
5. Quick turnaround results from vadoze zone data will be discussed in C-101 TWRWP. **Ongoing.**

### **Issues:**

1. Ecology requests a TOC/WTP Integrator be a participant in both TOC and WTP sections of the ORP PMM Meetings. **Complete. Integration team will have a participant in PMM and Quarterly meetings.**
2. Agreement on content/format of CD Tank Completion Certification is needed. **Tied to Action number 11, ORP (Kemp) will attempt to setup a meeting with Ecology in mid-December.**

### **Actions:**

1. Discuss Issue #1 [Ecology requests a TOC/WTP Integrator be a participant in both TOC and WTP sections of the ORP PMM Meetings] with ORP Assistant Manager to resolve issue by November PMM. Actionee: Glyn Trenchard **Complete. Integration team will have a participant in PMM and Quarterly meetings.**
2. Establish calendar event (day/time) for bi-weekly and Parties determine attendance. **Complete. Updated and invite sent to ECY and ORP contacts.**
3. Schedule meeting between ORP and Ecology on September 22, 2011 RFI WMA C Workplan/SAP Meeting Minutes. Actionee: Bob Lober. **Closed 11/09/2011 and submitted to admin record.**
4. ORP will submit change notice for M-045-92B specific to monitoring plan, scope, and schedule for TY Barrier. Actionee: Bob Lober. **Status is open. Anticipated date for submittal is 15<sup>th</sup> of December.**
5. Briefing on S and BY farms to assess data and barrier placement work to date. Actionee: Bob Lober. **Closed 11/08/2011, meeting minutes being developed.**
6. Brief Ecology on Sample Analysis/Validate C-101 and C-104 post May 2012. Actionee: Bob Lober. **Status is open.**
7. ORP/RL set up meetings on GW assessment evaluation based on Ecology questions on provided information. Actionee: Ecology **Closed. Will be addressed through action 8.**
8. Continue meetings on RFI nature and extent sections/CMS between ORP and Ecology. Actionee: Bob Lober. **Status is open and ongoing.**



**ORP/Ecology TPA and CD Agreements, Issues, Actions, and  
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9. Ecology provide a date to submit comments on WIR Process Description for M-045-80 Item 1. Actionee: Jeff Lyon. **ORP 11/03/2011 Email request for comments; Ecology 11/03/2011 Email response noted RCRs by Monday, 11/07/2011.**
10. ORP will provide response to Lyon's (Ecology) questions on Baseline clarification [Handout given by Jeff Lyon]. Actionee: Joni Norton **Questions discussed at ORP/ECY Senior Management Level. Continuing response for PM-level information requests.**
11. Ecology and ORP will meet to discuss meaning/interpretation of CD definition of practicability. **Tied to Issue number 2, ORP (Kemp) will attempt to setup a meeting with Ecology in mid-December.**
12. Meet with Jeff Lyon (Ecology) on questions regarding SST Integrity and will put forth meeting minutes to next PMM. Actionee: J. Johnson. **Complete. ORP and ECY met on 11/03/2011 to discuss. Meeting minutes were generated and will be included in November Quarterly TPM Administrative Record.**

**Recent Items Entered into the TPA Administrative Record:**

(see <http://www5.hanford.gov/arpir/?content=advancedSearch> - search EDMC File Number)

Item Description	TPA/CD Topic or Milestone Tie	TPA Admin Record – EDMC File Number
ORP October 2011 TPA Report	All	0099866
ORP October 2011 CD Report	All	0099867
AOR Final Doc. for SSTs on 750,000 Gallon Tanks	M-045-91G-T02	0099871
Meeting Notes Waste Management Area C Work Plan Revisions held on September 22, 2011: Status of the WMA C RFI/CMS Investigation And Work Plan	M-045-60	0100054
Ecology approval of SAP for SST Sidewall Coring: Ecology letter 11-NWP-138	M-045-91B	0100052
SST Integrity Status Meeting Minutes held on 11/03/2011	M-045-91	Handout for November Meeting
TOC-ENV-NOT-2011-0020: Environmental Notification of the Waste Compatibility Assessment for 241-C-112	Tank Farms	Handout for November Meeting

Additional milestone information can be found here: <http://msc.rl.gov/tpamsa/>